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Thomas S. Shaw
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May 3, 2007

VIA HAND DELIVERY

Ms. Karen J. Nickerson
Delaware Public Service Commission
Cannon Building, Suite 100
861 Silver Lake Boulevard
Dover, DE 19904

RE: Docket No. 07-20 - In the Matter of Integrated Resource Planning for the Provision of Standard Offer Supply Service by Delmarva Power & Light Company Under 26 Del. C. § 1007(c) & (d): Review of Initial Resource Plan Submitted December 1, 2006 (Opened January 23, 2007)

RE: Docket No. 06-241 - In the Matter of Integrated Resource Planning for the Provision of Standard Offer Service by Delmarva Power & Light Under 26 Del. C. § 1007(c) & (d): Review and Approval of the Request for Proposals for the Construction of New Generation Resources Under 26 Del. C. § 1007(d) (Opened July 25, 2006)

Dear Ms. Nickerson:

On behalf of Delmarva Power & Light Company, attached please find an original and 10 copies, for each of the above-referenced dockets, of Delmarva's Comments in Response to the Independent Consultant's Interim Report, filed April 4, 2007; the Independent Consultant's presentation to the Delaware Public Service Commission and representatives of the Office of Management and Budget, Controller General, and Energy Office, made at the April 24, 2007 regularly scheduled meeting of the Public Service Commission; and the comments of other parties and the public on Delmarva's Integrated Resource Plan in Docket No. 07-20 and the Request for Proposal in Docket No. 06-241.

Delmarva proposes, as more fully set forth in the attached filing, that the Commission reject the RFP bids, which are not in the best interest of Delmarva's SOS customers, and aggressively move ahead on the many actions in the State-required IRP process. Contrary to claims that this is a "do nothing" option, Delmarva believes this is an aggressive program that provides for the lowest cost and most environmentally

friendly option for our customers. We do not need to hold open the RFP process to move forward on exploring new ideas.

In the attached document, Delmarva cover's the fundamental reasons to reject these bids:

- The bids will result in significant and irrevocable cost increases for up to 25 years;
- The bids will not result in improved price stability, as sought in the legislation;
- Multiple scenarios, including very high natural gas cases have not changed the results of the evaluation;
- None of these options are needed for reliability;
- The capacity of these proposed plants is not needed to supply energy to SOS customers;
- Any "market test," as suggested by the Staff consultant, will not change the results of these bids;
- These long-term contracts do not integrate well into the existing full requirements service being provided and will add additional costs;
- Selecting the wind project solely for environmental reasons places an unfair burden on a small segment of customers. Delmarva does not believe it is fair to place the entire burden of a *statewide* initiative on SOS customers, which only account for 28% of the energy usage in the State; and
- Our customers can choose to leave SOS service and this migration is a real risk, as a smaller pool of Delmarva SOS customers will face increasing costs under the long-term contract.[1]

Given all of these factors, we feel that the interests of Delmarva's SOS customers would be best served by:

1) not accepting any of the RFP bids and closing the RFP process; and
2) continuing to move forward to accept the IRP as filed and the many recommendations by Delmarva in the IRP.

Moreover, Delmarva is pleased to see innovative new ideas, such as the Sustainable Energy Utility ("SEU"), introduced by one of the authors of the Act, and a strong critic of any long-term contracts for new generation. Like Delmarva, the SEU believes that these long-term contracts are not the right solution for our SOS customers, but instead, will eliminate the need and motivation for more important demand side management

[1] A contract over which neither the Commission nor the State agencies will have any real jurisdiction, as such contracts are governed by the Federal Energy Regulatory Commission pursuant to longstanding federal law.

programs. Should Delmarva be required to procure more energy than is needed by our customers, there is little incentive to also support programs to reduce energy use in homes or businesses.

Many are concerned that this discussion has brought up several issues that still need to be discussed, as well as introduced other options to be considered as we move forward. For instance, does the State want to be more aggressive in the development of renewable options? Delmarva is open to discussions of such policy issues with all stakeholders across the state. A number of important considerations should be addressed as we begin a discussion on state-wide energy policy issues: First, the legislators started an initiative last year to explore what variation of regulation/deregulation makes sense for Delaware. This is a very important and fundamental decision that should be made prior to any other longer term decisions. Second, as a point of fairness, while Delmarva is open to many ideas for the development of new renewable sources of energy, Delmarva does not believe it is fair to place the entire burden of a *statewide* initiative on SOS customers, who account for only 28% of the energy usage in the State.

All parties should reject the bids, and in order to resolve these larger policy issues, Delmarva believes the State should bring together a group within the State that is broader than just Delmarva Power and the current participants in the RFP/IRP proceeding to discuss and resolve these issues, and make recommendations to move us forward in our quest to plan for the future energy needs of Delaware.[2]

Respectfully submitted,

Thomas S. Shaw

cc: Docket No. 06-241, Service List
Docket No. 07-20, Service List

[2] On May 2, 2007, PSC Staff filed its Review and Recommendations on Generation and Bid Proposals. Therein, Staff recommends that Delmarva be directed to negotiate with Conectiv for a 150-200 MW gas-powered facility AND with Bluewater for a 200-300 MW wind farm. In light of the timing of this recommendation, Delmarva does not respond here other than to reserve its rights to do so and to state that the recommendation is wholly inconsistent with Staff's Independent Consultant's previous findings that the RFP responses are costly and fail to achieve price stability. As such the RFPs do not achieve the goals of HB-6 and should not be accepted, either individually or in hybrid form.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF DELAWARE

IN THE MATTER OF INTEGRATED RESOURCE PLANNING FOR THE PROVISION OF STANDARD OFFER SUPPLY SERVICE BY DELMARVA POWER & LIGHT COMPANY UNDER 26 DEL. C. § 1007(C) & (D): REVIEW OF INITIAL RESOURCE PLAN SUBMITTED DECEMBER 1, 2006 (OPENED JANUARY 23, 2007)	)	**PSC DOCKET NO. 07-20**
IN THE MATTER OF INTEGRATED RESOURCE PLANNING FOR THE PROVISION OF STANDARD OFFER SERVICE BY DELMARVA POWER & LIGHT UNDER 26 DEL. C. § 1007(C) & (D): REVIEW AND APPROVAL OF THE REQUEST FOR PROPOSALS FOR THE CONSTRUCTION OF NEW GENERATION RESOURCES UNDER 26 DEL. C. § 1007(D) (OPENED JULY 25, 2006)	)	**PSC DOCKET NO. 06-241**

DELMARVA POWER & LIGHT COMPANY'S COMMENTS ON THE INDEPENDENT CONSULTANT'S INTERIM REPORT AND PRESENTATION TO THE DELAWARE PUBLIC SERVICE COMMISSION AND STATE AGENCIES ON DELMARVA'S INTEGRATED RESOURCE PLAN

May 3, 2007

Delmarva Power & Light Company
800 King Street
P.O. Box 231
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DELMARVA POWER & LIGHT COMPANY'S
COMMENTS ON THE INDEPENDENT CONSULTANT'S INTERIM REPORT AND PRESENTATION TO THE DELAWARE PUBLIC SERVICE COMMISSION AND STATE AGENCIES ON
DELMARVA'S INTEGRATED RESOURCE PLAN

Delmarva Power & Light Company ("Delmarva" or the "Company") hereby files these comments in response to: the Staff of the Delaware Public Service Commission Independent Consultant's ("Staff's IC") Interim Report, filed April 4, 2007 (the "Interim Report"); the Independent's Consultant's presentation to the Delaware Public Service Commission ("Commission") and representatives of the Office of Management and Budget, Controller General, and Energy Office made at the April 24, 2007 regularly scheduled meeting of the Commission; and, related comments of other parties and members of the public on Delmarva's Integrated Resource Plan ("IRP")[1] in Docket No. 07-20 and the Request for Proposals ("RFP")[2] in Docket No. 06-241.

I. INTRODUCTION

On December 1, 2006, as required by the Electric Utility Retail Customer Supply Act ("EURCSA" or the "Act"),[3] Delmarva filed an IRP with the Commission. On January 8, 2007, Delmarva filed Supporting Documentation to the IRP. In the Fall of 2006, also as required by the Act, Delmarva issued an RFP for the purchase of 400 MWs of energy under long-term contracts seeking new sources generation resources, to be built within the State of Delaware, to

[1] See Docket No. 07-20, In The Matter of Integrated Resource Planning for the Provision of Standard Offer Supply Service by Delmarva Power & Light Company Under 26 Del. C. § 1007(c) & (d): Review Of Initial Resource Plan Submitted December 1, 2006 (Opened January 23, 2007).

[2] Docket No. 06-241, In The Matter of Integrated Resource Planning for the Provision of Standard Offer Service by Delmarva Power & Light Under 26 Del. C. § 1007(c) & (d): Review and Approval of the Request for Proposals for the Construction of New Generation Resources under 26 Del. C. § 1007(d) (Opened July 25, 2006).

[3] 26 Del. C. § 1001 et al., Electric Utility Retail Customer Supply Act of 2006.

supply Delmarva's Delaware Standard Offer Service ("SOS") customers. On December 22, 2006, bids were received from NRG, Conectiv and Bluewater Wind, LLC.

The Act authorized the Energy Office, the Office of Management and Budget and the Controller General (collectively the "State Agencies") to participate and assist the Commission in making a decision on the RFP. The following key filings have been made by Delmarva and the IC:

- February 21, 2007 Delmarva's RFP Bid Evaluation;
- February 21, 2007 The Independent Consultant's RFP Bid Evaluation;
- March 7, 2007 Interested Parties comments on the IRP;
- March 23, 2007 Delmarva's Response to comments on the IRP;
- April 4, 2007 The Independent Consultant's Interim IRP Report;
- April 9, 2007 Public Comments on Generation Evaluation Reports;
- May 1, 2007 The IC's Addendum to Interim Report on Delmarva Power IRP in Relation to RFP.

The Commission subsequently hired Synapse Consulting to review Delmarva's IRP. On April 24, 2007, the Commission and the State Agencies met in a joint session to hear the Staff's IC present the Interim Report findings and to ask questions about specific aspects of the report. On May 8, 2007, the Commission has scheduled a meeting with the State Agencies under RFP Docket No. 06-241, to discuss preliminary decisions and provide direction to Delmarva regarding its RFP and IRP.

In Delmarva's view, it is inappropriate, unfair and not in the public interest to burden Delmarva's SOS customers with a long-term supply commitment under this RFP. In that, while there is customer choice, customers are likely to seek out other, lower cost, choices beyond the Company's supply, should energy prices, as expected, soar - which would then impact migration

issues, as well as the overall load size required to be served by the Company's default supply obligation, but not the contract price. Thereafter, a smaller and smaller pool of Delmarva SOS customers will face increasing costs under an increasingly burdensome long-term contract.[4]

A comprehensive review of Delaware de-regulation or re-regulation strategy and policy, on a statewide and not just Delmarva SOS customer basis, must take place prior to the Commission and State Agencies attempting to order a contract commitment under this failed RFP solicitation. An after-the-fact discussion and review of Delaware regulatory policies would be a meaningless exercise, as excessive contract costs would already be locked in for the next 10 to 25 years. Continuation of de-regulation of residential customers, or re-regulation of the utility industry, is a threshold issue that must be addressed before forcing Delmarva's SOS customers into a long-term supply commitment.

Moreover, Delmarva is pleased to see innovative new ideas, such as the Sustainable Energy Utility ("SEU"), introduced by one of the authors of the Act, a strong critic of any long-term contracts for new generation. Like Delmarva, the SEU believes that these long-term contracts are not the right solution, and will, in fact, eliminate the need and motivation for more important demand side management programs. When there is more energy than required, there is little incentive to reduce dependence on energy in the homes and businesses of the state.

For the reasons set forth herein, on behalf of its customers, Delmarva strongly recommends that the Commission and the State Agencies not accept any of the RFP bids and

[4] A contract over which the neither the Commission, nor the State Agencies, will have any real jurisdiction, as such contracts are governed by the Federal Energy Regulatory Commission, pursuant to longstanding federal law.

close the RFP process, and that the Commission continue to move forward to accept the IRP as filed and the many recommendations by Delmarva in the IRP. [5]

II. EXECUTIVE SUMMARY

1. ACCEPTING ANY OF THE BIDS WILL RESULT IN SIGNIFICANT AND IRREVOCABLE COST INCREASES TO DELMARVA CUSTOMERS FOR 25 YEARS

The RFP bid evaluation prepared by Delmarva, using the agreed-upon analysis methods and the point scoring system prescribed by the Commission and Energy Office, indicated that these bids could incur costs of up to *$2 to $5 billion dollars* above what SOS customers would otherwise pay, based on forecasted market prices for electric service. The same evaluation, prepared by the Staff's IC, indicated additional above-market costs of $*1.8 to $3.4 billion dollars*. Importantly, these projected increases are not over current rates but *in addition* to forecasted rising energy prices. Further, these results either increased or did not materially fluctuate as a result of the numerous scenarios evaluated by Delmarva and the Staff's IC as part of the IRP and RFP Bid. As the Staff's IC stated at the April 24, 2007 meeting of the Commission and State Agencies, none of the bids are "compelling choices."

[5] The Company already has before the Commission a comprehensive plan to begin offering Demand Side Management programs (both energy efficiency and demand response programs) and the Commission should move quickly on the process of approving this plan. See Docket No. 07-59, Docket No. 07-28, Blueprint For the Future. See also, Decoupling Proceeding. Delmarva already has plans in place to meet any RPS legislation Delaware should feel appropriate. Delmarva is open to working with the Commission, State Agencies, Legislature and other interested parties to seek a global solution to these Statewide issues - so long as the cost of conducting such proceedings are equitably shared and equitably charged to Delmarva's SOS customers, Delmarva will, through the open market, procure the renewable resources our customers require. The Company has submitted and awaits approval on our MAPP project and we look forward to working with Delaware towards a successful build-out of these new transmission lines. Finally, Delmarva has worked with the Commission and other interested parties to improve our annual bidding process of 3-year rolling bids, a process put in place this year, whereby residential rates have remained flat and commercial rates have come down. We remain open to extending these bids up to 5-years to provide longer term stability.

Thus, by accepting either of the Bluewater or NRG bids, the Commission and State Agencies will be irrevocably locking in a 25-year financial burden for SOS customers. This burden, which could be as much as the nominal $2 to $5 billion noted above, would require the almost 300,000 SOS customers to pay, on average, rate increases of $22 to $55 *per month* over and above forecasted increasing market prices for 25 years ($264 to $660 per year, per SOS customer). Using the Staff's IC above-market cost figures (from the Generation Bid Evaluation), the average monthly additional cost to SOS customers would be approximately $20 to $37 ($240 to $444 per year, per customer). Again, these dollars represent the *additional cost above market* an average customer would pay each and every month (or year), on average, for 25 years and represent a very significant increase in the price of providing SOS service for Delmarva's customers.

2. ACCEPTING ANY OF THE BIDS FOR A LONG TERM POWER PURCHASE AGREEMENT WILL NOT RESULT IN THE DESIRED GOAL OF PRICE STABILITY AT REASONABLE COST FOR DELMARVA SOS CUSTOMERS, AS MANDATED BY THE ACT

A long-term contract does not mean long-term fixed prices to retail SOS customers. For the following reasons, none of the Bluewater, NRG, or Conectiv bids will provide price stability, as mandated by the Act:

- The Bluewater and NRG bids will create an imbalance between supply and demand for SOS customer energy procurement and would require Delmarva to either purchase additional energy or sell excess energy on the spot market. Any excess costs incurred under either of these bids would be placed into deferred accounts, to be recovered later from SOS customers;

- The Conectiv and NRG proposals contain annual adjustment factors based on various indices that can lead to significant variations in year-to-year pricing;

- Neither the Bluewater nor NRG bids provide full requirement service to retail customers. These requirements will need to be procured from other providers or the open market;

- The Conectiv and NRG proposals contain "pass-through" provisions for unanticipated costs, such as carbon capture and sequestration, which are either not known or not identified at the time the contract is initiated. These costs would be passed on to SOS customers;

- The over-market cost of the bids could lead to customer migration to other suppliers, requiring readjustments to recover the costs of the long-term contracts. This will result in an increase in the on-going SOS rates to the remaining customers;

- The large contracts represented by the Bluewater and NRG bids simply do not provide a good match with the hourly electricity demand of SOS customers. As noted above, this mismatch will require the excess generation secured under the contract to be sold into the market, most likely at times when a loss will occur. These losses will be passed on to customers. This "market trading" activity is highly speculative and volatile. It requires specialized processes, systems and trained employees. In order to manage this risk, Delmarva would need to develop these trading resources internally or contract with a qualified firm. Either way is likely to be expensive for SOS customers; and

- The Bluewater bid, which requires Delmarva to purchase up to 400 MW of wind power, does not mean there are no variable retail charges to SOS customers. Wind power is not free. Wind power has expensive upfront costs to construct and a hidden fuel price risk that is embedded in the cost of replacement power purchases required (which may be at peak market price times) when the wind power is not available. In addition, the Bluewater bid includes regular annual cost increases.

3. MULTIPLE CASE SCENARIO ANALYSIS INCLUDING THE VERY HIGH GAS CASE AND THE AGGRESSIVE GENERATION RETIREMENT CASE DID NOT CHANGE THE RANKINGS OF THE ORIGINAL RFP EVALUATION

Delmarva's analysis of the bids was extremely robust. A wide range of options and scenarios were tested, including alternatives relating to substantially higher natural gas prices and substantial retirements of fossil plants. Many of these scenarios were proposed by Staff's IC, including ones that proposed extraordinarily high natural gas prices, higher load in New Jersey due to less-effective energy efficiency programs, and much higher retirements of existing capacity in the PJM. In all cases except one, the price of power available from the market would

be better than any of the bidders, and in all cases, the Bluewater and NRG bids are at least $1.3 billion more costly. Thus, even if some of the major uncertainties vary widely from Delmarva's assumptions, it is best that Delmarva's SOS customers not be burdened with a long term PPA.

4. DELMARVA FAITHFULLY FOLLOWED THE ACT, THE COMMISSION AND ENERGY OFFICE'S PRESCRIBED SCORING APPROACH IN PREPARING THE COMPREHENSIVE RFP BID EVALUATIONS AND THE BIDS SHOULD NOT BE RANKED DIFFERENTLY ACCORDING TO ANY NEW OR DIFFERENT CRITERIA

Delmarva followed the process prescribed by the Commission and the Energy Office in evaluating and scoring each of the RFP bids. The process was designed to comprehensively consider all of the important characteristics of each bid, including price, price stability, environmental factors, transmission, siting requirements, and many other factors. Consequently, both "price" and "non-price" factors, *including environmental factors, as prescribed by the Commission*, were already explicitly considered in the detailed bid evaluations, following Commission and Energy Office prescribed procedures.

In addition to the initial evaluation of the bids, alternative scenarios were evaluated at Staff's IC's request and each scenario analyzed also followed the Commission and Energy Office prescribed process. This process included an evaluation based upon the "super-categories" developed by Staff's IC. In every case for each scenario, the relative rankings of the bids did not change.[6]

[6] Delmarva objects to Staff's IC's recommendation at the April 24, 2007 Commission hearing, that the Commission and the State Agencies could change the bid rankings by re-weighting the super-categories, even though the super-categories have already been used in the manner prescribed by the Commission and Energy Office. The purpose of Delmarva's and Staff's IC's RFP evaluations was to properly and independently rank the various bids in a consistent, orderly fashion, in accordance with the guidance and directives of the Commission and the Energy Office. Having done so, not only for the base case, but also for multiple scenarios, Delmarva does not believe that applying additional criteria *ex-post* provides any meaningful information and would undermine the credibility and integrity of the entire evaluation process.

5. NONE OF THE PROPOSED PROJECTS IS NEEDED TO PROVIDE RELIABILITY FOR DELMARVA'S SOS CUSTOMERS

Delmarva fully considered reliability issues, including generating unit retirements, new transmission construction, existing transmission upgrades, the implementation of the Reliability Pricing Model ("RPM"), the role of PJM in the planning process, and "short-term supply and demand imbalances," in preparing and developing the IRP. As noted in the IRP, Delmarva has proposed a new transmission project, the Mid Atlantic Power Pathway ("MAPP"). MAPP is flexible in that it can be constructed in segments and each segment provides important reliability benefits on its own, so that even if the entire MAPP project is not constructed, the individual segments constructed will still provide reliability. At present, MAPP is one of seven transmission projects - down from 32 - still under consideration by PJM. The reliability benefits of the individual MAPP segments will accrue to Delmarva customers, even if the total MAPP project is considerably delayed (although the total reliability benefits will be greatest if the entire MAPP project is completed). The fact that the individual segments of MAPP provide increased reliability by themselves provides greater flexibility to Delmarva in addressing any reliability issues that may arise from an acceleration of the timing of generation unit retirements at Indian River (as well as Units #3 and #4 at Edgemoor).[7] This is discussed further in Delmarva's Reliability Report, attached as Appendix B to this report.

It should also be pointed out that the risks associated with short-term supply and demand imbalances are fully mitigated under the current 3-year rolling SOS procurement process. Delmarva's SOS procurement policy requires suppliers to deliver energy to the Delmarva zone, thus the suppliers' bids to provide SOS service must cover their risk of transmission congestion.

[7] The decision to retire generating stations is not part of the current RFP process.

Because the energy prices of each SOS contract are fixed for 3 years, any congestion that occurs during the contract period does not affect the current prices paid for energy by SOS customers.

6. THE CAPACITY REPRESENTED BY THE PROPOSED BIDS IS NOT NEEDED TO SUPPLY THE ELECTRICAL ENERGY REQUIREMENTS OF DELMARVA'S SOS CUSTOMERS

It is not prudent, or in the public interest, to force Delmarva to procure capacity for SOS Customers, as that capacity is not needed to serve SOS customer load. Delmarva's IRP indicates that capacity will not be needed in the Delaware portion of the Delmarva Peninsula until the year 2030. Until then, it is better for customers, from a cost perspective, to use existing resources, both inside and outside of Delaware, which are more than sufficient to satisfy SOS customer requirements.

7. A "MARKET TEST," AS PROPOSED IN THE INTERIM REPORT, IS NOT A NEEDED OR NECESSARY PREREQUISITE FOR THE COMMISSION AND STATE AGENCIES TO MAKE A DECISION TO REJECT THE RFP BIDS

Delmarva's IRP evaluated future price forecasts of the PJM pool as a proxy for long-term PPA costs. Such forecasts already include all regional generation, including renewables, generating units already under construction, and generating units selected by the Integrated Planning Model ("IPM") of Delmarva's consultant, ICF International ("ICF"). Based on this evaluation process, such a "market test" is redundant with the IRP analysis already conducted. The IRP has already considered all regional generation sources and showed no need for additional capacity for SOS customers. In addition, the Act only authorized Delmarva to conduct bids for new generation located within the State of Delaware. A short form version of an all-source RFP "market test," an option recommended by the Interim Report, would

essentially provide no additional information for evaluating or reevaluating any of the bids presently under consideration in the RFP process.

If the market test bids were "worse" than the current bids, it would not change the rankings of our recommendations against selecting any the current bids. Similarly, if the market test bids were "better" than the current bids, it would still not change the ranking of our recommendations against selecting any of the current bids. The short form version of an all-source RFP market test would also do nothing to address any of the significant risks to SOS customers presented by the execution of a long-term power purchase agreement and do nothing to comply with EURCSA. Thus Staff's IC's proposed "market tests" should not be an excuse to delay the Commission and State Agencies' decision on the current bids.

8. LONG-TERM CONTRACTS DO NOT INTEGRATE WELL OR EASILY WITH FULL REQUIREMENTS SERVICE AND ADDITIONAL COSTS WOULD BE INCURRED TO MANAGE SUCH CONTRACTS

None of the suggestions described in the Interim Report, including: 1) the sale of energy and capacity to the spot market; 2) the requirement that one or more bidders supply their portion of SOS load on top of the long-term contract; 3) the sale of energy and capacity to suppliers at the same time SOS requirements are bid; and 4) the allowance for wholesale suppliers to link SOS requirements with long-term purchases, provide any substantive benefit over Delmarva's current 3-year rolling SOS procurement process.[8] This process *already secures full requirements* energy and capacity for SOS customers, without additional charges for risk management services. Under full requirements contracts, Delmarva's SOS customers are not exposed to the spot market, congestion costs or added environmental compliance costs, nor are

[8] Delmarva notes that the recent State of Delaware auction to procure power for state offices awarded contracts for *3- year terms.*

they exposed to any deferred costs arising from out-of-market energy procurement accruing to retail rates. Any long-term unit contingent power purchase agreement, such as represented by the Conectiv, Bluewater or NRG bids, exposes Delmarva SOS customers to both of these significant risks and will be a giant step backwards in managing SOS procurement risks, as these risks would become both expensive and difficult to mitigate.

9. IT IS NOT EQUITABLE FOR SOS CUSTOMERS TO BE RESPONSIBLE FOR PAYING FOR A CONTRACT WITH BLUEWATER IF THE ONLY JUSTIFICATION FOR SUCH A CONTRACT IS FOR ENVIRONMENTAL PURPOSES

If a contract were to be awarded to Bluewater solely on the environmental issue of increasing Delaware's dependence on renewables, Delmarva's SOS customers who consume only 28% of the energy usage in Delaware would be 100% responsible for paying for the projected $2 billion additional cost over market required to secure such renewables. All others in Delaware and around the region would be getting a free ride.[9]

The State of Delaware has a well defined Renewable Portfolio Standard ("RPS") in place. This is the correct mechanism for equitable resolution of Delaware's renewable needs. Delmarva already has a mechanism in place, whereby our SOS suppliers must meet the Delaware RPS on behalf of Delmarva's SOS customers. This process assures a more equitable distribution of costs to all residents of Delaware for the incremental cost of renewable resources.

[9] All customers who want "green" energy could choose to procure energy from suppliers already licensed in Delaware that provide such an offering.

10. SOS CUSTOMER MIGRATION IS REAL AND REPRESENTS A SIGNIFICANT EXPOSURE TO REMAINING SOS CUSTOMERS, IF DELMARVA IS COMPELLED TO ACCEPT A LONG-TERM CONTRACT

If the SOS rate for Delmarva's SOS customers becomes *higher* than the market rate, then SOS customers will have a significant incentive to buy their electricity from other suppliers, who will have enough pricing "head room" to offer a more competitive rate to Delmarva's SOS customers. Because Delmarva residential customers have not yet experienced a situation where SOS rates are higher than competitive market rates, it is ill-advised to conclude that significant migration will not occur for these customers.

III. DISCUSSION

A. ACCEPTING ANY OF THE BIDS WILL RESULT IN SIGNIFICANT AND <u>IRREVOCABLE</u> COST INCREASES TO DELMARVA CUSTOMERS FOR 25 YEARS

The RFP bid evaluation prepared by Delmarva, using the agreed-upon analysis methods and the point scoring system prescribed by the Commission and Energy Office, indicated that the Bluewater and NRG bids could incur costs of up to *$2 to $5 billion* above what SOS customers would otherwise pay, based on forecasted market prices for electric service. The same evaluation, prepared by the IC indicated additional above-market costs of $*1.8 to $3.4 billion*. Importantly, these projected increases are not over current rates, but *in addition* to forecasted rising energy prices. Further, these results either increased or did not materially fluctuate as a result of the numerous scenarios evaluated by Delmarva and Staff's IC, as part of the IRP and RFP Bid evaluations. As Staff's IC noted at the April 24, 2007 meeting, none of the proposals provides a "compelling choice."

By accepting one of these bids, the Commission and State Agencies will be irrevocably locking in a 25-year financial burden for SOS customers. This burden, which could be as much as $2 to $5 billion above market, would require almost 300,000 SOS customers to pay, on average, rate increases of $22 to $55 *per month* over and above forecasted increasing market prices for 25 years ($264 to $660 per year, per SOS customer). Using Staff's IC's above market cost figures, the average monthly additional cost to SOS customers would be approximately $20 to $37 ($240 to $444 per year, per customer). These dollars represent the *additional cost above market* an average customer would pay each and every month (or year), on average, for 25 years and represent a very significant increase in the price of providing SOS service for Delmarva's customers.

The IC also performed an analysis of the additional cost in levelized 2005 dollars, calculated using a discount rate to freeze costs at 2005 levels. The IC performed this analysis to compare bids with different contract lengths (e.g., Conectiv's 10-year proposal and Bluewater and NRG's 25-year proposals), so as to have an "apples to apples" comparison over different lengths of time. Unlike Delmarva's, Staff's IC's analysis is based upon an average Delmarva SOS customer bill using 1,000 kWh a month, instead of an average dollar per Delmarva SOS customer. The IC's analysis, based on levelized 2005 dollars per MWh, indicated about a $1, $12, and $15 incremental cost for the Conectiv, Bluewater and NRG bids, respectively. While levelized costs can be a useful analytical tool to compare alternatives with varying contract lengths, customers do not receive or pay their electric bills in "levelized" dollars. Delmarva believes that the extra $22 to $55 dollars per month, per customer (or Staff's IC equivalent of $20 to $37) that each customer, on average, would need to pay each month over the life of the contract, is a better representation of the monthly financial burden the Bluewater and NRG bids

would place upon SOS customers. The above-market prices created by a PPA with all of these bids would also create an environment favorable to customer migration to other suppliers, who could provide the same services at the lower market price. This would lead to even greater financial burdens being placed upon the backs of the remaining SOS customers.

Like Staff's IC, Delmarva also prepared a levelized cost analysis of the bids and made these results public. In rank order, Delmarva determined the future levelized cost of all the power required by SOS customers, when including the bids, to be as follows (in 2005 dollars):

- Market Cost $ 85.40/MWh
- Conectiv Cost $ 86.60/MWh
- Bluewater Wind Cost $ 99.50/MWh (best bid)
- NRG Cost $106.90/MWh (best bid)

Thus, it is apparent that the market is a better alternative for consumers than any of the proposed bids. Further, the much higher costs of the Bluewater and NRG bids, compared to market, hold true under a wide range of other conditions, as evaluated through myriad scenarios. In fact, under all scenarios, Bluewater and NRG never get close to the cost of power from the market.

To understand the bids under a wide range of economic environments, Delmarva tested a number of cases, including two very high prices for natural gas. While Delmarva considers both of these cases to be extremely unlikely, Delmarva wanted to be responsive to the requests of Staff's IC and those stakeholders who suggested that purchasing from one of the bidders would be a hedge against high gas prices. Specifically, as requested by Staff's IC, Delmarva tested one case in which natural gas prices were 30% above ICF's long-term gas price forecast and another in which the gas prices went permanently "through the roof," and were 70% above the ICF long-term forecast. The results of these scenarios are shown below:

SCENARIO	Levelized Cost, 2011-2038 (2005$)				
	Market Price	Conectiv	BW	NRG[1]	Delivered Delmarva Gas Prices ($/MMBTU)
Base Case	$85.4	$86.6	$99.5	$107.6	$ 7.45
IC Case - reference gas price - plus 30%	$97.8	$97.8	$108.9	$109.5	$ 10.12
Extreme gas price scenario - plus 70%	$99.3	$99.1	$110.5	$110.4	$ 12.59

These scenarios indicate that no matter how high the gas price, the Bluewater and NRG bids do not compare favorably with the market. In both of these extremely high gas cases, the Conectiv bid is either equivalent to, or slightly better than, the Base Case, since the price escalation in the price of the Conectiv bid is tied to an index for coal, not natural gas.

The scenario results reported above were obtained, in part, from the imbalance between the SOS customer load and the required generation MWh out-take from either the Bluewater or NRG bids. For example, the cost to SOS customers of Bluewater's bid needs to include the cost of purchasing power from the market during all the hours that the wind turbines would not be operating. Since the wind turbines have a low capacity factor, Delmarva must make these purchases a high percentage of the time. Importantly, since wind generation tends to be less in the summer than the winter, and the cost of the purchases from the market is higher in the summer, this high cost of power purchases significantly affects the cost SOS customers would have to pay for the Bluewater project.

Delmarva believes that such significant and irrevocable financial burdens should not be imposed upon our SOS customers.

Finally, there is a glaring lack of substantive or quantitative evidence in the record of the current proceedings as to the customer benefits of any of the bids. Moreover, generally, no party

has quantified any customer benefits of long-term Power Purchase Agreements for Delaware's SOS customers.

B. ACCEPTING ANY OF THE BIDS FOR A LONG-TERM POWER PURCHASE AGREEMENT WILL NOT RESULT IN THE DESIRED GOAL OF PRICE STABILITY AT A REASONABLE COST FOR DELMARVA SOS CUSTOMERS, AS MANDATED BY THE ACT

A long-term contract does not mean long term fixed prices to retail SOS customers. None of the Conectiv, Bluewater or NRG bids will provide price stability, as mandated under Act for the following reasons:

- The Bluewater and NRG bids will create an imbalance between supply and demand for SOS customer energy procurement and would require Delmarva to either purchase additional energy or sell excess energy on the market. Any excess costs incurred under either of these bids would be placed into deferred accounts, to be recovered later from SOS customers;

- The Conectiv and NRG proposals contain annual adjustment factors based on various indices that can lead to significant variations in year-to-year pricing;

- Neither the Bluewater nor NRG bids provide full requirement service to retail customers. These requirements will need to be procured from other providers or the open market;

- The Conectiv and NRG bids contain a "pass-through" provision for unanticipated costs, such as carbon capture and sequestration, which are either not known or not identified at the time the contract is initiated. These costs would be passed on to SOS customers;

- The over-market cost of the bids could lead to customer migration to other suppliers, requiring readjustments designed to recover the cost of the long-term contract, that increase the on-going SOS rates to the remaining customers;

- The large contracts represented by the Bluewater and NRG bids simply do not provide a good match with the hourly electricity demand of SOS customers. This mismatch will require the excess generation secured under the contract to be sold into the market, most likely at times when a loss will occur, and these losses will be passed on to customers. This activity is highly speculative and volatile. It requires specialized processes, systems and trained employees. In order to manage this risk, Delmarva would need to develop these resources internally or

contract with a qualified firm. Either way is likely to be expensive for SOS customers; and

- The Bluewater bid, which requires Delmarva to purchase up to 400 MW of wind power, does not mean there are no variable retail charges to SOS customers. Wind power is not free. Wind power has expensive upfront costs to construct and a hidden fuel price risk that is embedded in the cost of replacement power purchases required when the wind is not available (which may be at peak market price times). In addition, the Bluewater bid includes regular annual cost increases.

During the RFP bid evaluation process, Delmarva carefully analyzed the stability of the bidders' prices. Under a range of scenarios, Delmarva evaluated how the price of power for customers – assuming that the bidder was successful - would vary compared to the price of power from the market[10] without the bid. This analysis included all elements of the wholesale price of power for SOS customers. When this analysis was complete, it was clear that the bids did not substantially reduce the price risk for SOS customers – i.e., they did not materially enhance stability.

The NRG and Conectiv bids were even less effective than Bluewater in achieving the Act's goal of price stability. Even though the Bluewater proposal does not achieve price stability for SOS customers, under the prescribed scoring system Bluewater received a full 20 points for the price stability factor, because the Bluewater bid provided more stability than the other two bids. NRG received no points and Conectiv received very few points.

Moreover, this evaluation did not include the risk of price instability that could arise under NRG's bid, should NRG be required to undertake carbon capture and sequestration ("CCS"). This increases the price risk to SOS customers, since the cost of CCS is not definitive at this time.

[10] The bid evaluation did not reflect the more stable market alternative associated with 3-year SOS auctions. It is clear that the stability results for the bids, when compared to that of the market, would have been worse if a 3-year auction assumption was used as the market reference case.

Delmarva believes that its current approach of purchasing power through a competitive bidding process, for full requirements, rolling 3-year contracts from the PJM market, is the best approach for procuring the energy requirements of SOS customers in a manner that provides price stability at a reasonable cost. In particular, this approach:

- Provides a hedge based on all the available capacity in the entire PJM market (with capacity of more than 150,000 MW), which comprises a mix of all fuels;
- Mitigates the risk of any changes in the market price in one year (e.g., when the price of gas rose due to Hurricanes Katrina and Rita), since each year is only one-third of the mix of Delmarva supplies. In the case of the hurricanes, gas prices returned to normal within six months;
- Places the risk on the suppliers of matching the SOS customer load with generation supply, since Delmarva only needs to purchase power for SOS customers at the times they require such power. In contrast, under the "must take" PPA proposals from Bluewater and NRG, Delmarva would be required to purchase power when the bidder produces it and then sell any excess to the market. Delmarva would also have to purchase any shortfall in generation if the output was less than the SOS customer load;
- The price per MWh under each 3-year supply contract is <u>fixed</u> and the purchasing contracts require suppliers to take the risk of short-term price volatility, including price spikes, changes in fuel prices and congestion risk.

Thus, the Bluewater and NRG bids are notably inferior in providing price stability compared to the approach that Delmarva currently uses to procure SOS electricity requirements. Delmarva's IRP recommends the continued use of the Commission-approved 3-year auction process for procuring SOS customer electricity requirements.

C. MULTIPLE CASE SCENARIO ANALYSIS, INCLUDING THE VERY HIGH GAS CASE AND THE AGGRESSIVE GENERATION RETIREMENT CASE, <u>DID NOT CHANGE THE RANKINGS</u> OF THE ORIGINAL RFP EVALUATION

Delmarva's analysis of the bids was extremely robust. A wide range of options and scenarios were tested, including alternatives relating to substantially higher natural gas prices

and substantial retirements of fossil plants. Many of these scenarios were proposed by Staff's IC, including ones that proposed extraordinarily high natural gas prices, higher load in New Jersey due to less-effective energy efficiency programs, and much higher retirements of existing capacity in the PJM. In all cases except one, the price of power available from the market would be better than any of the bidders, and in all cases, the Bluewater and NRG bids are at least $1.3 billion more costly. Thus, even if Delmarva's reference case is not correct and some of the major uncertainties vary widely from Delmarva's assumptions, it is best for SOS customers not to sign a PPA with any of the bidders at this time.

The validity of Delmarva's evaluation of the bids was confirmed by Staff's IC, whose evaluation came out with the same rank-ordering of the bids, and with points that were highly consistent with Delmarva's evaluation. The IC awarded Bluewater and NRG a few more points than Delmarva, and in both cases, far less than Conectiv, but the conclusion they reached is exactly the same. The IC also said that none of the bids should receive a PPA at this time. The IC reconfirmed this conclusion in its "Interim Report" on the integration of the RFP results and the IRP on April 4, 2007. Thus, the experts in bid evaluation have provided the PSC with a consistent message: reject these bids.

The specifics around each of these scenarios are presented in more detail in Appendix A of this report.[11]

[11] This table summarizes the number of scenarios developed for both the IRP and the RFP by Delmarva and Staff's IC.

	Delmarva		Independent Consultant		Total
	IRP	RFP	IRP	RFP	
Base Case	1	1		1	3
Scenarios	6	6	2	8	22

D. DELMARVA FAITHFULLY FOLLOWED THE ACT AND THE COMMISSION AND ENERGY OFFICE PRESCRIBED SCORING APPROACH IN PREPARING THE COMPREHENSIVE RFP BID EVALUATIONS AND THE BIDS SHOULD NOT BE RANKED DIFFERENTLY ACCORDING TO ANY NEW OR DIFFERENT CRITERIA

Delmarva followed the process prescribed by the Commission and the Energy Office in evaluating and scoring each of the RFP bids. The process was designed to consider all of the important characteristics of each bid, including price, price stability, environmental factors, transmission, siting requirements, and many other factors. Consequently, both "price" and "non-price" factors, *including environmental factors*, were already explicitly considered in the detailed bid evaluations, following Commission prescribed procedures.

The scoring system (i.e., the criteria and their relative weights) was approved by the Commission and the Energy Office. Thus, if a bidder or other stakeholder takes issues with the scoring system, including the criteria and their weights, they are taking issue with the Commission.

The State Agencies and Staff's IC collaboratively agreed upon the evaluation process with Delmarva. Both Delmarva and Staff's IC came to the same conclusions in applying that evaluation process. Thus, if a stakeholder objects to the evaluation of bids, they are taking issue with those that have substantial expertise in each of the areas being scored.

In addition to the initial evaluation of the bids, a number of alternative scenarios were evaluated at Staff's IC's request and each scenario analyzed also followed the Commission prescribed process. This process included an evaluation based upon the "super-categories" developed by Staff's IC. In every case, for each scenario, the relative rankings of the bids did not change.

Delmarva objects to Staff's IC's recommendation at the April 24, 2007 Commission hearing that the Commission and the State Agencies could change the bid rankings by re-weighting the super-categories, even though the super-categories have already been used in the manner prescribed by the Commission and Energy Office. The purpose of Delmarva's and Staff's IC's RFP evaluations was to properly and independently rank the various bids in a consistent, orderly fashion, in accordance with the guidance and directives of the Commission and the State Agencies. Having done so, not only for the Base Case, but also for multiple scenarios, Delmarva does not believe that applying additional criteria *ex-post* provides any meaningful information and would undermine the credibility and integrity of the entire evaluation process.

E. NONE OF THE PROPOSED PROJECTS IS NEEDED TO PROVIDE RELIABILITY FOR DELMARVA'S SOS CUSTOMERS

Delmarva fully considered reliability issues, including generating unit retirements, new transmission capacity, existing transmission upgrades, the implementation of the Reliability Pricing Model ("RPM"), the role of PJM in the planning process, and "short-term supply and demand imbalances," in preparing and developing the IRP.

i. Potential Generating Unit Retirements

Delmarva employed ICF's proprietary IPM in preparing the IRP. The IPM is designed to consider not only when to call for new generation additions, but to also evaluate whether existing generating units should be retired or "mothballed." In each year of the planning period, IPM evaluated all existing generating units in the model, including the Indian River units located in Delaware, and determined, based upon operating cost and capital cost assumptions, whether it made economic sense for each unit to continue operation. The IPM included all cost of

operation, including compliance with the Regional Greenhouse Gas Initiative ("RGGI") and any other known environmental requirements. Consequently, contrary to Staff's IC's assertion, Delmarva's IRP explicitly modeled and evaluated the likelihood of unit retirements.

The IPM model results indicated that the Indian River units would remain economic operating units for the next ten years. The results did indicate that these units would be running at lower capacity factors than in the past, due to their increased cost associated with RGGI and other environmental compliance. It should be noted that completion of the MAPP would have a significant positive influence on any reliability issues related to generating unit retirements on the Delmarva Peninsula.

In addition, PJM's generation de-activation rules provide PJM, as the RTO, mechanisms to address potential reliability issues arising from a generation retirement request. These rules include a notification period and a study process to ensure that reliability upgrades are implemented before a generator retires. However, because it is possible, though not likely, that the timing of a potential generation retirement may precede the completion of the entire MAPP project, Delmarva has also developed a reliability contingency plan.

ii. Transmission Upgrades

Pepco Holdings, Inc.'s ("PHI") proposed MAPP project would provide the Delmarva Peninsula access to out-of-state generation resources by linking the region to generation resources to the west and southern New Jersey. The project requires PJM approval to proceed and is currently one of **seven** projects (recently reduced from 32) still being considered for approval. (Note that this status has changed since the Interim Report was issued). PHI is confident that the project will be approved by PJM sometime this summer, especially because, when considered in combination with other proposed projects to bring power from further west

to the eastern PJM sub-region served by MAPP, the combined projects will receive a high score for eliminating interface overloads.

It is important to note that the MAPP project can be constructed in segments and that each segment provides important reliability benefits on its own. The reliability benefits of the individual MAPP segments will accrue to Delmarva customers, even if the total MAPP project is considerably delayed (although the total reliability benefits will be greatest if the entire MAPP project is completed). The fact that the individual segments of MAPP provide increased reliability by themselves provides greater flexibility to Delmarva in addressing any reliability issues that may arise from an acceleration of the timing of generation unit retirements at Indian River (as well as Units #3 and #4 at Edgemoor).[12] This is discussed further in Delmarva's Reliability Report, attached to this report.

iii. Reliability Pricing Model

The model used to develop Delmarva's IRP models the PJM capacity market based on PJM's recently implemented RPM. PJM's RPM was not created in a vacuum. It was developed through a deliberate consensus process of PJM stakeholders and market participants (including Delmarva and the Delaware PSC). The intent of RPM is to provide greater stability in the generation capacity market in order to provide generators more certainty in the capacity revenues that they will receive. It is designed to provide for greater capacity payments in those local areas that are most likely to benefit from additional generation, creating a significant incentive for generation development to locate there. PJM submitted the RPM to FERC and it was approved in December 2006.

[12] The decision to retire a generating unit is not part of the current RFP process.

In PJM's recent RPM auction, the Delaware capacity prices for delivery in 2007 cleared at just over $60/kW-year. Delmarva is of the opinion that these prices, while higher than expected for 2007, will not have a significant impact on the evaluation of the bids. This is because the relevant period for the bid evaluation is the 28-year period from 2011 to 2038. Within this period, the IPM model's forecasts of capacity prices are generally higher than the PJM RPM prices. Therefore, if RPM prices for future years remain at the same level as the 2007 prices, the impact on the bid evaluation will be minimal.

Even higher prices are unlikely to have a significant impact on the bid evaluation. PJM price caps limit the maximum prices to approximately $100/kW-year, price levels that are unlikely to be sustained for more than a few years. High capacity prices, above the levels projected by the IPM model, will encourage the rapid construction of new generation resources, which will then depress prices.[13]

With regard to the specific bids, each of the bids requires purchases from the market to meet Delmarva capacity and energy needs – i.e., none of the individual bids is sufficient to meet the entire Delmarva capacity need. Thus the higher RPM prices will affect the market supply cost and also each of bids. Although the impact of the higher prices on the market supply cost will be more than that on the bids, these higher prices will not be sufficient to lower any of the bid prices below the market supply cost.

Given the extensive and thorough analysis of the PJM capacity markets that took place in the development of RPM by myriad PJM stakeholders, and PJM's leading role in power market

[13] This view is supported by an April 13, 2007 Morgan Stanley Research paper, which concluded: "We believe investors should view Friday's release of PJM reliability pricing model (RPM) auction results for the 2007/8 delivery year (DY) with caution. While we expect RPM to result in higher capacity prices in transmission constrained zones for the 2007/8 delivery year, our analysis suggests capacity prices could decrease significantly in Eastern MAAC for the 2008/9 and 2009/10 DY."

development, it is very likely that RPM will succeed in its primary mission to stimulate the development of new and additional generation within PJM. In conclusion, the assertion, without documentation or supporting evidence, in Staff's IC's Interim Report that "RPM may not work" does not represent a likely scenario.

iv. PJM

Delmarva is a member of PJM, the largest and most advanced power pool in North America. Many other power pools and control areas look to the PJM experience with reliability planning and market design to provide guidance, as they seek to further develop their own power pools and associated markets. PJM has as its membership all of the public and private participants in the business of generating, transmitting, marketing and distributing electric power (including the Delaware PSC, PHI and NRG) and has shouldered regional reliability responsibilities, including Delaware's, for decades.

Among PJM's myriad responsibilities is the coordination of system reliability planning across the entire PJM region. PJM takes an active role in creating and enforcing the market rules that govern PJM markets and system reliability.

The conclusion stated in the Interim Report that "Delmarva's position is that the market will take care of these risks with little, if any, intervention by Delmarva or the State Agencies" is clearly misleading, in that Delmarva actively participates in PJM, which provides the controls, planning, and system operating rules for the regional PJM markets. Also the PSC and generators located in Delaware are participating stakeholders in PJM.

The market planning process for regional electric supply and transmission is very dynamic and pro-active. PJM's reliability planning process involves hundreds of stakeholders

who are continually working together under a highly formal, PJM-managed, consensus process (as well as federal oversight) to assure that the "market" is working properly.

v. Short-Term Supply and Demand Balance

The IPM model used by ICF assumes that in each year of the planning period there will be a balance of power supply and power demand. Long-term power planning models, such as IPM, assume that markets will work towards equilibrium and that market participants will make rational economic decisions. This is how electric power systems are designed and operated. The Interim Report suggests that Delmarva's IRP is deficient because it does not consider short-term excess capacity or demand situations. What the Interim Report fails to note is: 1) such short-term situations are temporary, as these disequilibrium situations naturally create incentives for corrective action to be taken; and 2) Delmarva's rolling 3-year procurement strategy already mitigates these short-term risks for SOS customers (e.g., congestion).

Power system design and planning are based on supply and demand being "in balance" within a reserve margin. For example, as load grows and reserve margins decrease, planning models call for additional demand side management, conservation, transmission and/or generation, as appropriate on an economic basis. It would make no sense from a planning or economic perspective to assume that any electric supply/demand decisions would be made on a non-economic basis or that any imbalance of power supply and demand could not be brought back into equilibrium, as long as market participants make economic decisions. Consequently, assuming a long lived supply/demand imbalance in the power market would require market participants to make and continue to make non-economic (i.e., irrational) decisions. Nevertheless, while Staff's IC has objected to Delmarva's use of the IPM model that assumes rational decision-making, Staff's IC chose to rely upon this same model for all of its evaluations.

Delmarva believes that an assumption of irrational decision making within a planning model is simply not acceptable to Delmarva, the Commission, or Delmarva customers. In any event, suggesting that temporary imbalances in power market supply and demand would justify a long-term power purchase agreement is not supportable, and Staff's IC provided no documentation or evidence to support its assertion. As GE Chairman Jeff Immelt noted in a recent news article, energy companies are being asked "**to take a 15-minute market signal and make a 40-year decision and that doesn't work..."**

Finally, it should be pointed out that the risks associated with short-term supply and demand imbalances are fully mitigated under the current 3-year rolling SOS procurement process. For example, Delmarva's SOS procurement policy requires suppliers to deliver energy to the Delmarva zone, thus the suppliers' bids to provide SOS service must cover their risk of transmission congestion. Because the energy prices of each SOS contract are fixed for 3 years, any congestion that occurs during the contract period does not affect the current prices paid by SOS customers for energy.

F. THE CAPACITY REPRESENTED BY THE PROPOSED BIDS IS NOT NEEDED TO SUPPLY THE ELECTRICAL ENERGY REQUIREMENTS OF DELMARVA'S SOS CUSTOMERS

It is not prudent, nor in the public interest, for Delmarva to procure capacity for SOS Customers, as that capacity is not needed to serve SOS customer load. The Act did not give Delmarva the option of first carrying out an IRP and then conducting an RFP if and when the IRP showed a need for new capacity. Rather, the Act required Delmarva to run both the RFP and IRP processes in tandem, with the RFP actually due November 1, 2006, one month before the IRP was filed on December 1, 2006.

In fact, Delmarva's IRP indicates that capacity will not be needed in the Delaware portion of the Delmarva Peninsula until the year 2030. Until then, it is better for customers, from a cost perspective, to use existing resources, both inside and outside of Delaware, which are more than sufficient to satisfy SOS customer requirements.

The IC has recommended that, should the Commission and the State Agencies reject all the bids, Delmarva should be instructed to develop a "Contingency Plan" to obtain "required generation." The IC suggests that a combustion turbine or gas-fired combined cycle plant might be installed (subject to Commission approval) "to mitigate increases in local capacity prices and congestion risk." However, Delmarva recommends that the Commission and the State Agencies reject this proposal as unnecessary because: 1) as discussed above, such capacity is simply not needed to supply SOS load; 2) under the current SOS procurement process short-term congestion risk is borne by suppliers, not SOS customers; and 3) in the event of early retirements of generation in Delaware, portions of the MAPP project and other transmission upgrades can be advanced to address any potential reliability concerns. (See below "Transmission Upgrades" above and Appendix B for specifics on Delmarva's transmission contingency upgrade plans.)

G. A "MARKET TEST," AS PROPOSED IN THE INTERIM REPORT, IS NOT A NEEDED OR NECESSARY PREREQUISITE FOR THE COMMISSION AND STATE AGENCIES TO MAKE A DECISION TO REJECT THE RFP BIDS

The Interim Report criticizes the IRP for not evaluating long-term power purchase opportunities from regional generation resources as a price stability measure. The Interim Report also suggests that Delmarva conduct a "market test" of either: a) a short form version of an all-source RFP for long-term power supplies that would not be limited to new generation

within the State of Delaware; or b) a renewables only RFP if Bluewater's bid is deemed most attractive pursuant to the current RFP. (See Interim Report, at page 40). However, Delmarva's IRP evaluated future price forecasts of the PJM pool as a proxy for long-term PPA costs. Such forecasts already include all regional generation, including renewables, generating units already under construction, and generating units selected by the IPM planning model. Based on the process already evaluated, such a "market test" as proposed by Staff's IC is redundant with the IRP analysis already conducted.

At the April 24, 2007 Commission and State Agencies meeting, Mr. Cherry of the Delaware Department of the Environment questioned the need for such a "market test." Delmarva shares these concerns for the following reasons:

First, as Delmarva has stated throughout this process, long-term power purchase agreements, based upon unit contingent contracts with "must-take" provisions, are not a proper solution for procuring low cost power for Delaware's SOS customers, nor do they provide for better price stability. Delmarva's compelling arguments against long-term power purchase agreements remain in effect, whether or not a generating facility is located within Delaware.

Second, the IRP considered all regional generation sources and showed no need for additional capacity for SOS customers. Consequently, it would make little sense for Delmarva to consider a solicitation for an unneeded resource.

Third, the Act only authorized Delmarva to conduct bids for new generation located within the State of Delaware. Delmarva was in no way authorized to conduct such a bid with out-of-state generators on behalf of Delmarva's SOS customers. Without such authorization, Delmarva doubts that any solicitation would be taken seriously by potential respondents.

Fourth, based upon the Company's prior experience with long-term power purchase agreements and the integrated resource planning process, and faced with the EURCSA requirement that, under the RFP process, bids be solicited for long-term contracts from new generation sources located within the State of Delaware, it would have been impractical from a resource point of view, due to the relatively short time frame allowed by the Act, to simultaneously solicit out-of-state bids, even if such authorization had been obtained. Asking bidders to respond to such proposals as a "test," without expectation of a contract being awarded, would waste the resources of all parties and jeopardize the credibility of future RFPs.

Fifth, because the IPM is a *regional* planning model, the IRP has already considered the effects of out-of-state generation construction on Delaware SOS customers. The IPM model obtains an optimal least-cost planning solution by including existing generation, generation projects that have already broken ground, and locating additional generation resources within the PJM region, in those locations where it is most economic to do so. Consequently, Delmarva's IRP results already have included the effect of out-of-state generation construction and development. Thus, further "tests" and RFPs are not necessary.

Sixth, a short form version of an all-source RFP "market test," one option recommended by the Interim Report, would provide no additional information for evaluating or reevaluating any of the bids presently under consideration in the RFP process. If the market test bids were "worse" than the current bids, it would not change the rankings for recommendations of the current bids. Similarly, if the market test bids were "better" than the current bids, it would still not change the ranking or recommendations for the current bids. The short form version of an all-source RFP market test would also do nothing to address any of the significant risks to SOS customers presented by the execution of a long-term power purchase agreement and do nothing

to comply with EURCSA. Thus Staff's IC's proposed "market tests" should not be an excuse to delay the Commission and State Agencies decision on the current bids.

Finally, a renewables only RFP "market test" for energy, capacity, and Renewable Energy Credits ("RECs") if Bluewater is the preferred bid, as proposed in the Interim Report, has the following problems:

1. Bluewater was not the top ranked proposal in either Delmarva's or Staff's IC's independent bid evaluations;

2. A long–term power purchase agreement for a unit-contingent renewable resource results in all the same significant risks and problems as a long-term power purchase agreement for a non-renewable resource;

3. As an example of a contract for renewable resources, the Interim Report cites a recent *5-year contract* for REC's executed by PECO. It would be a welcome development if Staff's IC and Staff are now proposing that 5-year contracts can be considered as "long-term" contracts, as opposed to the 10 to 25-year terms prescribed in the RFP process. Delmarva has stated in its IRP that it would consider extending the current SOS procurement contracts to 5 years, with Commission approval; and

4. There are more appropriate ways to encourage renewable resource development than through an RFP for long-term contracts. Delmarva respectfully submits that the use of the RPS standards to procure renewable resources for SOS customers to balance the environmental benefits of renewable resources with the added cost of the renewable resources is much more preferable for SOS customers than a PPA obtained through a long term renewables-only RFP.

H. LONG TERM CONTRACTS DO NOT INTEGRATE WELL OR EASILY WITH FULL REQUIREMENTS SERVICE AND ADDITIONAL COSTS WOULD BE INCURRED TO MANAGE SUCH CONTRACTS

The IC suggests several ways that energy and capacity under long-term contracts could be managed for SOS customers. None of the suggestions described in the Interim Report, including: 1) the sale of energy and capacity to the spot market; 2) the requirement that one or more bidders supply their portion of SOS load on top of the long-term contract; 3) the sale of energy and capacity to suppliers at the same time SOS requirements are bid; and 4) the

allowance for wholesale suppliers to link SOS requirements with long-term purchases, provide any substantive benefit over Delmarva's current 3-year rolling SOS procurement process. This process *already secures full requirements* energy and capacity for SOS customers, without additional charges for risk management services. Under full requirements contracts, Delmarva's SOS customers are not exposed to the spot market, congestion costs, or added environmental compliance costs, nor are they exposed to any deferred costs arising from out-of-market energy procurement accruing to retail rates. Any long-term unit contingent power purchase agreement, such as represented by the Bluewater or NRG bids, exposes Delmarva SOS customers to both of these significant risks and will be a giant step backwards in managing SOS procurement risks, as these risks would become both expensive and difficult to mitigate.

a. The Interim Report suggests that Delmarva can procure full requirements SOS as currently practiced and, in addition, use a PPA to "hedge" these SOS purchases by reselling the PPA sales to the market independent of the full requirements SOS contracts. Delmarva does not believe that this practice qualifies as a "hedge," but, more importantly, makes Delmarva a "middleman" in the open generation market, with all the significant speculative and volatile risks of being a participant in that market. As such, there should be no expectation that Delmarva's reselling of power obtained through a PPA would result in any stabilization of price or reduction of cost to SOS customers. In fact, SOS customers would face the risk of having their rates increased to cover likely losses incurred in this recommended process.

b. The IC Interim Report suggests that third party energy suppliers could provide energy and capacity on top of the PPA when a generating unit that is part of a long-term PPA is not running. While it is possible that such third parties may bid on such an arrangement, any such bidder would need to protect itself from possible generation outages that may occur during high price periods. Consequently these bids are likely to require a <u>substantial premium</u> over the energy cost of the PPA. Delmarva notes that the original RFP developed by Delmarva would have required all bidders in the RFP process to provide *firm* energy, which would have mitigated this problem. At the time, Staff's IC actively opposed including this requirement. Now Staff's IC is proposing an equivalent provision for firm energy, except that it involves Delmarva's SOS customers paying for extra services from *two* suppliers: the owner of the generating unit associated with the PPA and the third party providing the back-up energy and capacity.

c. The Interim Report points to Central Maine Power ("CMP") as an example of energy and capacity from a unit-contingent contract being sold to suppliers at the same time SOS requirements are bid, and SOS supply is linked to a long-term PPA. The Interim Report fails to disclose that a significant number of long-term PPAs were *already pre-existing* at the time of restructuring in Maine, and these contracts needed to be carried forward to avoid a breach of contract. This is clearly not the situation for Delaware, where no long-term contracts existed at the time of restructuring and there is no risk of paying a substantial penalty for a contract breach. Delmarva is not aware of any long-term PPAs for SOS supply that CMP executed *after* restructuring occurred in Maine.

If Delmarva were compelled to accept a long-term contract with either Bluewater or NRG, and had to adopt one of Staff's IC's suggested methods for managing SOS energy and capacity procurement with the long-term contract requiring the buying and selling of energy and capacity on a daily basis, Delmarva would, in essence, become a power trading organization. To manage this risk, Delmarva could either establish an internal trading organization or contract with an outside firm. Either alternative will be expensive to SOS customers.

I. IT IS NOT EQUITABLE FOR SOS CUSTOMERS TO BE RESPONSIBLE FOR PAYING FOR A CONTRACT WITH BLUEWATER IF THE ONLY JUSTIFICATION FOR SUCH A CONTRACT IS FOR ENVIRONMENTAL PURPOSES

If a contract were to be awarded to Bluewater solely on the environmental issue of increasing Delaware's dependence on renewables, the SOS customers, who consume only 28% of the energy usage in Delaware, would be 100% responsible for paying for the projected $2 billion additional cost-over-market required to secure such renewables. All others in Delaware would be getting a free ride. All customers who want "green" energy could choose to procure energy from suppliers already licensed in Delaware who provide such an offering.

The State of Delaware has a well defined Renewable Portfolio Standard in place. This is the correct mechanism for equitable resolution of Delaware's renewable needs. Delmarva

already has a mechanism in place whereby Delmarva's SOS suppliers must meet the Delaware RPS on behalf of Delmarva's SOS customers. This process assures a more equitable distribution of costs to all residents of Delaware for the incremental cost of renewable resources.

J. SOS CUSTOMER MIGRATION IS REAL AND REPRESENTS A SIGNIFICANT EXPOSURE TO REMAINING SOS CUSTOMERS IF DELMARVA IS COMPELLED TO ACCEPT A LONG-TERM CONTRACT

Delmarva's customers are eligible to select alternate energy suppliers. If SOS customers migrate to other suppliers *after* Delmarva is compelled to accept a long-term contract, the remaining SOS customers would receive significant increases in price to cover the contract obligations that remain, even though there are fewer customers.

Delmarva agrees that, to date, and as discussed at the April 24, 2007, Commission Meeting, customer migration in the residential and small commercial classes has included only several thousand customers, out of roughly 275,000 customers. However, since restructuring took place in Delaware, there has not been a period where SOS rates were noticeably *higher* than the competitive market rates offered by energy suppliers licensed in Delaware. Prior to the Spring of 2006, rate caps were still in effect and *SOS customer rates were below market rates.* This provided a strong incentive for SOS customers to remain on SOS. In the Spring of 2006, the rate caps expired and Delmarva had to procure SOS requirements from the market, resulting in an average residential rate increase of 59%. Even so, the increased SOS rate reflected the *current* competitive market rate, so SOS customer rates and market rates are very close, providing little pricing "head-room" for a competitive supplier to beat and attract new residential SOS customers.

If any one of the bids is accepted and the SOS rate becomes *higher* than the market rate, SOS customers will have a significant incentive to buy their electricity from other suppliers. These suppliers will have enough pricing head room to offer a more competitive rate to Delmarva's SOS customers. Because Delmarva residential customers have not yet experienced a situation where SOS rates are higher than competitive market rates, it is ill-advised to conclude that significant migration will not occur for these customers.

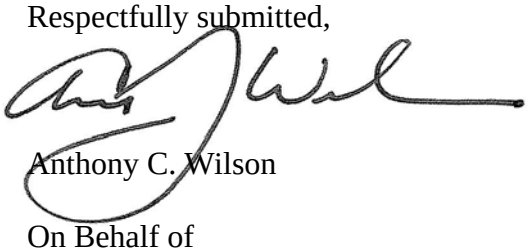
IV. CONCLUSION

Given the RFP responses and the extreme high costs, lack of reliability and failure to achieve price stability that both the Staff's IC and the Delmarva team have found, Delmarva proposes that the Commission aggressively move ahead on the many actions and open dockets (as identified) and the IRP process and reject the RFP bids as not in the best interest of Delmarva's SOS customers. The interests of Delmarva's SOS customers would be best served by:

- not accepting any of the RFP bids and closing the RFP process; and
- Delmarva working with the Commission, State Agencies, Legislature and other interested parties in seeking a global solution to the Statewide energy regulatory issues - so long as the cost of conducting such proceedings are equitably shared and not 100% charged to Delmarva's SOS customers.

Delmarva is of the view that it would be inappropriate, unfair and not in the public interest to burden Delmarva's SOS customers with a long-term supply commitment under this RFP.

Respectfully submitted,



/jpr

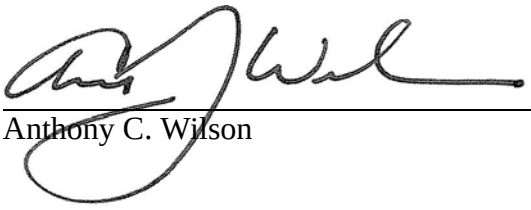
Anthony C. Wilson

On Behalf of
Delmarva Power & Light Company
800 King Street,
P.O. Box 231
Wilmington, DE 19899-0231

May 3, 2007

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing application was emailed, hand delivered or mailed, First Class, postage prepaid, to the Staff, the Office of Management and Budget, the Controller General, the Energy Office, and the service lists for this docket on this 3rd day of May, 2007.



/jpr
Anthony C. Wilson

Attachment 1

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Delmarva Responses to RFP Comments from Various Stakeholders

Delmarva Comments on the Firestone and Kempton "Point Counterpoint" Filing

Firestone and Kempton's Comment	Delmarva's Response
1. Expected price should receive the most points. The scoring scheme was arbitrarily set by Delmarva in the absence of a required test bid.	Any suggestion of arbitrariness in Delmarva's scoring of the bids is incorrect. The scoring criteria were reviewed numerous times by Commission staff and the IC and approved by the Commission and the Energy Office. In fact, the Commission and Energy Office notably modified the scoring to further take environmental concerns into account, added a "risk" factor, and made other changes to Delmarva's draft to ensure a balanced approach that incorporated all the factors required under the Act. After November 1, 2006, the scoring remained consistent throughout the RFP process and across all bids. If anything is arbitrary, it is the suggestion that the scoring system should be changed after the fact. It certainly must not be changed because the evaluation outcomes are perceived as unfavorable to some parties, or because a particular bidder did not fare well.
2. The State Consultants reports on bill impacts are incorrect; based on Firestone-Kempton calculations the average customer bill impact under the bids would only have a fractional impact on the rates customers pay.	Messrs. Firestone and Kempton are misinformed. The impact of bids on the price to customers is not just the bid price, but also must include: the costs of purchases when power from those projects when they are not available; the cost of selling power at times when it is not needed; the cost of any incremental transmission upgrades; the cost of imputed debt; etc. When such costs are included, the cost of the Bluewater and NRG bids range from $22-$55 per month more than Delmarva's proposed alternative.

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3. The IC indicated that the CO_2 costs in Delmarva's analysis are low, and that Synapse's report, in which the middle estimate is $19.6 per ton, is more accurate. With these numbers the BWW bid becomes attractive. With Synapse carbon cost forecasts the BWW rate impacts range from a 2% increase to a 1.5% decrease over the 25-year life of the project.	Delmarva included CO_2 emissions in the environmental analysis, and assessed a range of CO_2 costs in our price modeling. We included scenarios in which the CO_2 cost was quite high, so the risk of this occurring was explicitly included in our analysis, and the Bluewater Wind bid did not become attractive in these cases. Moreover, it is not reasonable to assume, as these stakeholders have done, that a very high long-term CO_2 price (or any highly unlikely event) has a 100% chance of occurring, or a very high chance of doing so. Such scenarios must be balanced by others that are much more likely to determine the best path.
4. When the external costs of health damages and care are quantified and considered, $6.63/MWh should be added to the market case, and an additional $.99 to the wind case.	Federal and State environmental regulations are set to properly mitigate health impacts. The Commission and Energy Office determined at the outset that estimates of health impacts would not be part of this proceeding. There is no RFP process of which Delmarva is aware anywhere in the country that has ever taken such impacts into account. Further, as mentioned above, it would be wholly inappropriate to include any new factors in the analysis after the fact.
5. Delmarva assumed that natural gas prices would remain relatively flat over the next three decades, however real prices increased more than 118% while nominal prices more than tripled between 1996 and 2006. If a more realistic natural gas price had been used, the BWW bid would have been more attractive on price components.	Past increases do not make future increases more likely. Messrs. Firestone and Kempton are simply wrong when they state that Delmarva assumed a relatively flat price for gas. Delmarva incorporated a levelized gas price in <u>real</u> terms, which means that there could be volatility during that period and it means that prices would increase in nominal terms. Also, Delmarva ran a number of scenarios on our own and for the IC that looked at <u>much</u> higher gas prices. The IC agreed that these scenarios were as high as could reasonably be projected, and it had relatively little impact on results. Part of the reason for this is that the cost of purchases from the market rises when gas prices rise, which lowers the competitiveness of the Bluewater Wind bid due to its low capacity factor.

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6. Each of the BWW bids is completely stable in isolation and would provide significant long-term price stability to rates. Since each of the BWW bids is stable in isolation, they should be awarded the full 20 points.	Even though Bluewater Wind does not substantially improve price stability for SOS customers, this bidder was awarded the full 20 points for price stability under the scoring system.
7. The negative environmental and health impacts of the two bids involving fossil fuels are far worse than those associated with BWW. Yet, Conectiv received 8.2 points while BWW received 7.8 on environmental impact.	This is not true. Bluewater Wind received substantially more points (over 11 out of 14 possible) than the other bids to reflect its lower environmental impact based on the Commission and Energy Office-approved scoring system. Again, the scoring system was approved by the Commission and Energy Office, and intentionally did not include health impacts in addition to those already taken into account through environmental regulations.
8. The BWW bids will result in no GHG emissions in operation and minimal emissions in manufacturing, construction and maintenance. It is inappropriate for Conectiv to receive half the number of points as BWW. Conectiv should receive zero or close to zero points in this category, based on its expected GHG emissions.	We used a scale to assign points for greenhouse gas emissions in which the fewer the emissions, the more the points awarded. Bluewater Wind therefore received the maximum points. Delmarva does not understand the comment that the Conectiv bid should receive zero or close to zero, since surely the NRG bid, with greater CO2 emissions, should received fewer points than Conectiv according to this reasonable approach. The IC agreed 100% with this approach and scored the bids exactly the same as Delmarva on the air emissions factors.
9. Only 1% of Delmarva customers have switched service to other providers recently, despite significant rate increases, invalidating the claim that it is risky to accept a bid at this time. If anything, a wind project would help Delmarva draw new customers based on the recent Firestone-Kempton scientific survey.	The comment misses the main point. Migration of kWhs is the critical factor, not the percentage of customers. There is no basis for their claim that more customers would move to Delaware to pay higher prices for wind-generated power. Even if this were the case, departures due to much higher ($22-$55 per month) prices would be much more significant in causing departures.

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10. The Firestone-Kempton scientific survey results show that Delmarva's SOS customers would rather pay more for clean energy. Even with a minimum premium of $20, 89% of respondents indicated they would prefer wind to the expansion of coal and gas. Delmarva's customers want clean wind power.	Delmarva favors renewables, and has included them through the State RPS and through purchases outlined in its IRP. The public is receiving clean power. To use a survey to score bids would be both inappropriate and unscientific, and would violate the Commission's and Energy Office's explicit instructions on how to score the bids. There are no processes anywhere in the country of which Delmarva is aware that use a customer survey to select a winning bidder.
11. While the power supplied would exceed load, this is only true of certain hours.	The exact hours in which power would need to be purchased and sold on the market as a result of signing a PPA with each of the bidders was part of the analysis. Bluewater Wind has by far the most such hours of purchases due to its low capacity factor. Delmarva should not be forced to over-commit, and potentially disadvantage customers by purchasing power it does not need.
12. This docket concerns a power purchase agreement (PPA). Neither Delmarva nor the ratepayers nor the State have an equity interest in the facilities. That is, all the risk is placed on the bidder and investors. Thus, the argument that the bids put customers at risk in the event of default, or unexpected price increases for labor, materials or fuel is not valid.	This is incorrect. Customers are absolutely at risk once the plant comes on line, since the cost of the PPA is passed directly on to customers. The only time during which customers would not be at risk is during the financing and construction, at which time the bidder is responsible and there are penalties for not meeting the required milestones. This is a short period compared to the 25-year PPAs with Bluewater Wind and NRG that Delmarva is being asked to sign. If the bidder defaulted during that period, Delmarva would be at risk to replace their power from the market at the then-current prices.

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13. Delmarva has argued that the BWW project is beyond that of any other wind project and is thus risky; however, several other entities have approved similar and larger projects, including the Texas General Land Office and the British Government. The builder will have six years of experience building offshore farms by the time the BWW wind farm is built, and again, the risk is on the bidder, not on Delmarva or its customers.	The bidders' experience was explicitly taken into account in the evaluation. Other states where large wind projects are only on the drawing board do not provide comfort or assurance that Bluewater Wind could bring such a project to fruition. Delmarva, a small utility, should not be forced to take the risk of a first-time-in-the-world project (in terms of its size for an offshore wind facility) that is also much larger than required for its load. As indicated above, the risk is NOT on the bidder once the plant comes on line.
14. The Act specified evaluation criteria for the bids: (a) rate stability; (b) reductions in environmental impact; and (c) benefits of adopting new technology. If the scoring is performed using this criteria, BWW outranks the other bidder 3:1.	Delmarva fulfilled the requirements to utilize the evaluation criteria mandated by the Act. All the factors mentioned were part of the scoring analysis.

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15. The Act states that the four state agencies may approve a bid if it cost-effectively meets the objectives of price stability, reductions in environmental impact, and new technology. It does not say that the State agencies may only approve a bid if it meets those criteria and the cost of doing so does not result in a rate increase. Understanding this, it is incorrect for the Consultants to equate the cost-effective standard in HB6 with a bid price below what could be purchased for on the open market.	The comparison to the market was only used for the price and price stability analysis – i.e., for 53 points. It is entirely appropriate to use the market for the analysis of these bid criteria. There were 47 other points assigned for non-price, risk and contract items that could have offset a higher price. Thus, the evaluation was quite balanced, and could have resulted in the top-ranked bidder being one that was not the lowest in price.
16. The RFP process is mandated by HB6 and is proceeding accordingly; therefore, it should not be abandoned.	Delmarva scrupulously followed the process mandated by the Act, and approved by the Commission and Energy Office. It in no way was abandoned.
17. Energy efficiency measures can be highly cost-effective and should be on the forefront of any energy management plan. Customers will still need power to run their energy efficient devices and Delmarva should move toward less dependence on polluting and aging plants. In Minnesota, RPS is likely to change. Delmarva should model it as such in the IRP, rather than using a static RPS.	Delmarva will move toward less polluting plants and sources of power, including energy efficiency, with its Blueprint for the Future.

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Delmarva Responses to Willett Kempton's Comments of April 9, 2007

Mr. Kempton's Comment	Delmarva's Response
1. New power will be needed for Delmarva, and conservation will not be sufficient to meet the need.	Delmarva, when it needs power, can best satisfy its customers' need for power by importing for years thereafter. ICF's modeling indicates that the next major addition on the Delmarva peninsula is not needed until the 2030 time frame, under the current assessment of market conditions and alternative scenarios. Thus, there is no need for the Commission and States Agencies to order the signing of a PPA with any entity now.
2. New generation from renewables provides a hedge against expected fossil fuel price increases and carbon fees.	Delmarva took scenarios with higher fuel prices and high prices for carbon into account in its analysis.
3. The IC says a "market test" should be conducted to compare the current bids to regional power contracts; Kempton is not convinced that the IC has made this case. He believes there is enough information to decide to contract with BWW, and that price should not be one of the evaluation criteria, since it is not mentioned in the RFP section of EURCSA.	There is enough information to evaluate Bluewater Wind, and it comes up short in the evaluation of what is best for consumers. By indicating that the Act not mention price as one of the RFP criteria cannot mean that any price would be acceptable. Of course price must be part of the bid evaluation, as it has been in all solicitations nationwide for decades, and as the Commission and Energy Office agreed.

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4. BWW has many positives, and the only significant negative on BWW is on price. In their survey and at the public meetings, customers expressed a preference for wind generation. No one in the public meetings spoke in favor of Conectiv, and choosing them would be to deny the public's preference and the other benefits of wind generation.	Three responses: a) Decisions about new generation to be sited are made by governmental agencies, both in Delaware and nationwide, not by survey of a group of consumers or appearances at public meetings. b) Delmarva is already required to purchase renewables under its RPS program, which will increase the bills of all consumers. Experience in other states is that when utilities offer renewables options, there is a very small percentage (less than 5%) willing to actually pay the differential. It would be inappropriate in the extreme for the Public Agencies to impose a $2 billion additional cost on consumers because a few customers are willing (or able) to pay $22 a month more for such power. c) There were other negatives for BWW on the non-price side, such as previous experience, financeability and certainty of permitting.
5. The "new technology" benefits, including jobs and less climate change, should outweigh other factors, including a penny difference in the cost of power. Focusing on these benefits is within the mandate of EURCSA.	The Commission and Energy Office agreed with the weight provided in the RFP for new technology and for CO2 emissions in the evaluation process. In fact, clean projects were favored for approximately 40 points out of 100 (20 for price stability, 14 for environmental impact, 3 for new technology, and 3 for fuel diversity). This is quite sufficient recognition of the benefits of wind generation.

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Delmarva Responses to Bluewater Wind Comments of March 26, 2007

Bluewater Wind Comment	Delmarva Response
1. Contrary to the RFP, which indicates that "all other proposals shall be scaled to the lowest cost proposal", the actual scoring system for price severely penalizes BWW. Making this correction would bring BWW to within 5% of Conectiv's score.	Proposals were scaled to the lowest cost bid, which received all possible points (33). To assign points to other bidders, there needed to be a range which to carry out the scaling. The IC and Delmarva agreed that this range should be $10 per MWh, unless the bids were of a broader spread, in which case it would be $15/MWh. Given the spread of bids, Delmarva applied the $15/MWh standard. There is no correction to be made for BWW. It is correct for the bids to have scored differently with respect to price. $2.0 billion to $5.0 billion cost differentials should have, and did have, varying price score outcomes.
2. The price comparison is "irrefutably flawed" in that Conectiv's and NRG's bids are not fixed, and neither is the market, while BWW's bid is contractually binding and will not change.	In recognition of the relative stability of its bid, BWW received all 20 possible points for the price stability factor, even though customers would still have up to approximately 65% of the instability from the market if a BWW bid were to be accepted. While its price is stable, however, it is important to recognize that BWW's bid does expose SOS customers to market variability since its capacity factor is low. Delmarva does agree that analyses regarding the future are uncertain, which is why we hired a firm (ICF) with a strong track record in this regard. For the price and price stability analyses, ICF employed not only a base or reference case in its analysis, but recognized uncertainty by assessing different scenarios for key variables such as fuel prices. The IC reviewed and agreed to the driving assumptions behind the price and price stability analyses. In addition, ICF ran additional cases at the IC's request to further expand and simulate the range of options and future conditions. With respect to these additional cases, the bid ranking bid not change.

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3. The reports understate the benefits of offshore wind since they do not fully consider the upstream and downstream environmental impacts.	The evaluation process favors clean energy projects for 40 out of the 100 points, including price stability (20), environmental impacts (14), new technology (3), and fuel diversity (3). This is a much greater benefit for clean projects than in any other utility solicitation of which we are aware (other than those set aside for renewables). The benefits of wind were thus more than adequately taken into account.
4. Climate change is particular important. A fixed price, zero-carbon offer should be looked at closely.	CO2 emissions were explicitly scored, and clean projects had an advantage for 40 points out of 100, as indicated above. BWW's bid was looked at very seriously.
5. There are biases against offshore wind in the bid evaluation, and "the scoring was based on faulty information or poorly informed assumptions". This may be due to evaluators' lack of experience with offshore wind.	There was no such bias. The bid evaluation was entirely informed, and included experts in project engineering, environmental impact assessment, permitting, renewable energy, regulatory policy, market analysis, transmission and more. There was a consistent approach to the scoring of all the bids by the IC and Delmarva.
6. The Commission should direct Delmarva to meet with BWW to resolve issues and provide an opportunity to negotiate a PPA.	There is no reason to proceed to negotiate a contract with a bidder that was fairly evaluated, and which turned out to be substantially inferior to both one of the other bidders and to the market option, after all the factors that the Commission and Energy Office required were included in the evaluation process.

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Delmarva Responses to Bluewater Wind Comments of April 9, 2007

Bluewater Wind Comment	Delmarva Response
1. Long-term risks of gas prices and carbon costs mean that long-term contracts are more desirable now. Short-term contracts allow Delmarva to maximize profits.	Delmarva took changing gas and carbon prices explicitly into account in its analysis. Delmarva makes no more money on short term purchases than long term purchases – the Company makes no money on either one.
2. Delmarva has a pre-disposition against long term contracts.	Delmarva has a positive disposition towards arrangements that are best for customers. Moreover, even if Delmarva had such a predisposition, the scoring only assigned a couple points for the "risk" factor that included the length of the contract, so eliminating the supposed bias that BWW says Delmarva has would not have affected the ranking of BWW at all.
3. Delmarva refuses to address properly the "potential magnitude of the risk that energy prices would shift higher on a long-term basis."	Delmarva increased gas prices in its reference case and alternative scenarios during the bid evaluation, and also ran a case in which gas prices were systematically higher in the runs for the IC. In no case did the bid ranking change.
4. In quoting from the IC, BWW says that "Delmarva perceives risk management as 'one way' risk for its shareholders". They then say "Delmarva seeks to maximize its profits and minimize its risk – even if the consumer would benefit by a long-term approach."	This is incorrect. Delmarva must balance risk to both customers and shareholders, and always strives to minimize volatility to customers. Delmarva would do so regardless, and in a state where customers can migrate to other suppliers, to do otherwise would be folly. Shorter-term purchases have nothing to do with Delmarva's profits; Delmarva only recommends them in this case because it is better for customers. In fact, Bluewater Wind's bid would not be best for customers on a long-term basis because of the approximately $2 billion more that customers would have to pay.
5. Conectiv's proposal provides little or no price stability, and provides no protection against global warming.	Conectiv's proposal provides the stability associated with coal price escalation, which is expected to provide greater stability than for natural gas. The carbon emissions of Conectiv are much less than for a coal project, including NRG's proposed IGCC plant, and Delmarva has reduced the points accordingly for its CO2 emissions.

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6. The IC cites the above market costs of BWW at a nominal $490 million, while Delmarva cites a figure of $2 billion.	The difference is that Delmarva's figure is a nominal amount over time, and the IC's is a present value
7. Current auction prices are in the range of $103/MWh (range of $99.60 to $117.60), while BWW's bid is $98.21/MWh in 2005 dollars. So how can the evaluation of their bid be that they are well above the market price?	The comparison is "apples and oranges". First, Delmarva's analysis assessed the market price over a 25 year period not just 37 months. Second, the SOS auction prices are for full requirements power, so the bidders must provide power at all hours required, which costs more than providing power only when a single plant is available. Third, the SOS auction prices include other costs such as retail supplier price premiums for full requirements service and ancillaries.
8. Most importantly, the decision on May 8 is not a final one, since the Commission will be able to review the contract negotiated.	PPA negotiations must be taken seriously. Delmarva should not be required to enter into negotiations with any provider unless it is expected that they will agree upon a contract that is best for consumers. BWW's bid is not, so any contract negotiated would be good for one primary party - BWW. Contrary to BWW's statement, there is no reason to provide them with an opportunity to negotiate a PPA.

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Delmarva Responses to NRG Comments of March 1, 2007

NRG Comment	Delmarva Response
1. Bid scoring focused excessively on price, placing capital-intensive projects at a disadvantage.	The Commission and Energy Office were responsible for the decision on the bid scoring approach and approved the point allocation for the entire bid evaluation process. Capital intensive projects were not at a disadvantage, as they have offsetting energy costs that were explicitly part of the analysis. The goal of the price analysis is to minimize costs to consumers, without bias as to whether that cost is related to the capital component of the bid or the energy component of the bid.
2. The bidders are awarded points in respect of the price evaluation in a "winner take all, loser take nothing" scheme that reinforces the bias against capital intensive projects. a. The scoring system is relative to the bids, not to market (this ignores the spread between the two, so if the scores were only 50 cents apart rather than $15 dollars apart the scores would be the same for the high and low; b. The approach does not evaluate each bid independently; c. There are insufficient bids to claim a statistically meaningful sample and hence distribute the prices normally.	As indicated above, there is no bias against capital intensive projects. Specifically: 2a. Winner does take all the points on the price factor, but to say "loser take nothing" is completely inaccurate, as those that were not the lowest price could still receive substantial numbers of points on this criterion. Using the $15/MWh scale employed, a $0.50 spread would have resulted in awarding 96.7% of the top score to the second place bidder. Indeed, the bids should have scored differently with respect to price. $2.0 billion to $5.0 billion cost differentials should have, and did have, varying price score outcomes. 2b. This is incorrect; the evaluations had an individualized approach in that each bid's "price" included an assessment of the cost of purchases from the market, the cost of imputed debt, the cost of necessary transmission upgrades, etc. This was highly individualized. 2c. We agree that there were relatively few bidders, but this was not surprising given the requirement that the offers be from within Delaware. This recognition was one reason we agreed with the Commission and Energy Office and the IC to use an absolute range, rather than a relative range, to evaluate the bids on price.

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3. NRG proposed using a Monte Carlo projection of market prices, and scoring bids relative to that projection.	There are a number of ways that price could have been scored. The manner agreed to by the Commission's Staff, the IC and Delmarva was reasonable and approved by the Commission and Energy Office.
4. The economics of the NRG bid were incorrectly computed: a. Coal prices projections too high – NRG states no need to use the CAPP low sulfur coal they proposed; b. NRG is willing to modify its inflation index choice.	4a. ICF's coal prices were reasonable and based on detailed market analysis, but even with lower prices that the IC requested ICF analyze, the NRG project was far more expensive than the market and the Conectiv bid, receiving few if any points on the price factor. Our evaluation utilized the numbers and information offered in NRG's proposal; if NRG had wanted to propose an alternate fuel type with a different escalation they could have done so. It is not Delmarva's responsibility to evaluate every possible permutation of fuels NRG could use, unless those were part of an NRG bid. 4b. NRG is confusing the bid evaluations with the bid negotiations. We had to use what was offered for bid evaluation.
5. BWW intermittency was not considered.	This is entirely incorrect. Bluewater Wind's intermittency was fully considered as part of the price evaluation.
6. Several of the non-price factors, which might be expected to counterbalance a general bias in favor of low cost, actually double count factors considered in the price evaluation, further biasing the results against capital intensive and coal gasification projects.	It is a challenge to design a system that has mutually exclusive factors, and that would also take into account the requirements of the legislation. The process of Delmarva proposing a draft on August 1, 2006, and then working closely with the Commission and Energy Office and the IC, culminating in a decision, led to a process that sorted out these complexities.

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Delmarva Responses to Comments of Alan Muller, Green Delaware of April 9, 2007

Green Delaware's Comment	Delmarva's Response
1. The Act focuses on both "price" and "price stability, without indicating a preference.	Delmarva agrees – both price and price stability are critical factors. The weighting agreed upon by the Commission and Energy Office reflects their importance.
2. Delmarva argues that an excess from the bids would have to be sold, rather than serving other Delmarva load (i.e., non-SOS customers).	The excess would have to be sold. The non-SOS customers have existing supplies of power, and neither the EURCSA nor the Commission has indicated that the supply for the remainder of Delmarva's customers should change.
3. Delmarva has indicated a preference for the "status quo."	This is not the case. Delmarva has indicated a preference to aggressively pursue efficiency and DSM; add some renewable generation; build the MAPP transmission line; and continue purchases of power from the wholesale market on a 3-year auction. Delmarva has also introduced the Blueprint for the Future to emphasize its commitment to energy efficiency over the long term. This multi-tiered, sophisticated strategy is far from the status quo, and is better for customers than any of the bids.
4. Except for wind, the other bids have significant health and climate change impacts.	Climate change was taken explicitly into account by assigning points for those bids that reduced CO2 emissions. With regard to health impacts, no project will be built that does not comply with emissions and health regulations. Clean energy projects were favored for receiving 40 out of 100 points.
5. "When the true balance of attributes, costs and consequences are exposed, new coal fails."	Delmarva ranked NRG's IGCC the lowest among the bids received
6. "The variability of a 200 offshore-Delaware wind project is a minor in the context of our power markets", which includes nearly 340 GW of power, when one adds the PJM and MISO together.	The cost and variability of the BWW project would not be absorbed by PJM and MISO as a whole, but by Delmarva's SOS customers. Also, the cost of power from the market is what will supply power to SOS customers when the wind is not blowing, so PJM and MISO are explicitly accounted for in the bid analysis.

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7. The BWW wind project should move ahead, and not be subject to an additional round of competition as the IC suggests. The NRG bid should be excluded on multiple grounds, and the Conectiv bid has concerns about self-dealing and is little more than the status quo.	There is no basis to "move ahead" with the Bluewater Wind project under the scoring of the bids, using the criteria agreed upon by the Commission and Energy Office. As mentioned above, Delmarva's proposal is not status quo (not that status quo is always bad) – rather, it's a proactive stance to do what is best for customers.

Attachment 2

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EXECUTIVE SUMMARY

This report summarizes Delmarva Power's plans to provide transmission capacity to ensure reliability for its Delaware customers. The major element of Delmarva's plan, as outlined in Delmarva's proposed Integrated Resource Plan ("IRP"), is the Mid-Atlantic Power Pathway ("MAPP"). This project, sponsored by Delmarva's parent company, Pepco Holdings, Inc. ("PHI"), and currently under review by PJM, is a 230 mile, 500 kV transmission line from Possum Point, Virginia to Salem, New Jersey, through the Delmarva Peninsula. This project, in combination with other proposed transmission projects linking western generation resources to the mid-Atlantic region, would assure reliable long-term power flows to Delaware from existing and planned generation sources, including renewables.

Importantly, phases of the MAPP project, together with other local transmission upgrades, will provide for critical reliable power should existing fossil generation units in Delaware be retired.

Delmarva's transmission facilities are located within the PJM Regional Transmission Organization ("RTO"). Delmarva works with PJM to ensure that reliability standards are met and that the necessary transmission facilities are built to meet the short-term and long-term needs of the Delmarva Peninsula

PJM as the RTO is responsible for ensuring:

- adequate generation or demand side resources across the entire region, including all three Delaware counties; and
- adequate transmission capacity to reliably and efficiently deliver the generation capacity where it is needed.

PJM meets these objectives by administering competitive markets that provide economic incentives that encourage development of merchant transmission, generation and demand side resources. In addition, PJM as the regional planner identifies necessary transmission enhancements through its Regional Transmission Expansion Planning ("RTEP") process. PJM's rules also provide adequate mechanisms to ensure reliability is addressed prior to any generation retirements. PJM rules are documented in its agreements and tariff approved by the Federal Energy Regulatory Commission ("FERC"). For additional information of the PJM Process, see Appendix A.

The technical aspects of this report document the results of Delmarva Power's evaluation of the system impacts of certain generation retirement scenarios. Consistent with established procedures, the study tested for thermal and voltage limits using system models that were approved by PJM for combination of potential generation retirements. Delmarva Power's analysis assumed potential coal-plant retirements in Delmarva South (Indian River ("IR") units

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1, 2, 3 & 4) and in Delmarva North (Edge Moor ("EM") units 3 & 4). These six (6) units represent 27% of the total existing generating capacity on the Delmarva Peninsula.

However, all actual retirement requests will be studied by PJM to identify reliability issues and necessary transmission enhancements. PJM will ensure that all necessary system enhancements are completed prior to authorizing any generation retirements.

The post contingency problems that show up as a result of the assumed pending retirements can be fully mitigated by implementing phases of the MAPP project. The installation of the 230kV portion of the MAPP project, in addition to advancement of a 138kV planned improvement, will relieve all reliability issues arising from potential retirements of IR 1 & 2. The estimated costs of these improvements are $79 M, with a construction window of 32-40 months.

In addition, for the extreme condition of assumed pending retirements of the 6 units, the installation of the 230kV portion of the MAPP project and of a 500kV portion of the MAPP project from Salem/Hope Creek to Indian River, the advancement of a 138kV planned project and installation of capacitor banks will address all foreseen reliability issues. The estimated costs of these improvements are $554 M with a construction window of 54 months.

These transmission improvements will help address the long-term reliability of the whole Delmarva Peninsula (not just Delaware), as well as other sub-areas of the PJM region. The regional grid is heavily integrated in order to allow the delivery of energy from various generation sources within the grid to load centers, such as the Delmarva Peninsula.

The phases of the MAPP project required to ensure reliability can be scheduled for implementation around need, such as generating unit retirements. Other phases of the MAPP project, once completed, will address longer-term reliability and projected load growth.

SCOPE

The purpose of this study is to determine the impact of losing coal-fired generation within the Delmarva Zone and how that affects system reliability. The generators that run on coal can be found at either the Edge Moor or Indian River power plants.

The studies were performed using system models on an approved PJM case for planning year 2011. This case was a Load Deliverability case where the load model represents an extreme peak load condition. The case is also modeled such that the Delmarva South Capacity Emergency Transfer Objective ("CETO") is met by reducing generation in Delmarva South (i.e., Bay Region) to increase the power transfers from Delmarva North (i.e., New Castle Region).

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Steady-state load flows were run to identify any thermal or voltage violations using PJM and Delmarva internal contingency criteria. All approved RTEP directed projects, as identified on the PJM website through 2011, were assumed to be in-service.

ASSUMPTIONS

The cases and associated files are the same as those used in the RTEP process. The following information pertains to the case used in the study:

- There is 767 MW's of coal-fired Generation at Indian River
  - IR#1 located on the 69 kV = 91 MW
  - IR#2 located on the 138 kV = 91 MW
  - IR#3 located on the 138 kV = 165 MW
  - IR#4 located on the 230 kV = 420 MW

- There is 270 MW's of coal-fired Generation at Edge Moor
  - EM#3 located on the 69 kV = 86 MW
  - EM#4 located on the 138 kV = 174 MW

- CETO (w/ IR#1 & IR#2) = 1377 MW

- CETO (w/o IR#1 & IR#2) = 1559 MW

- DPL South Load = 2373 MW

- DPL South Generation = 1715 MW

- Approved RTEP System Improvements/Upgrades assumed in the case

  - Cool Springs 230/69 kV Substation
  - 2nd North Seaford 138/69 kV Transformer
  - New 138 kV line from Oak Hall to Wattsville (138/69 kV transformer @ Wattsville)
  - Church 138/69 kv Transformer and Bus

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ANALYSIS #1: RETIREMENT OF INDIAN RIVER #1 & #2

The reliability issues raised by the retirement of both Indian River #1 and Indian River #2 in southern Delmarva can be mitigated by the implementation of the 230kV recommendation of the MAPP project. This will create a 230kV networked loop that will allow better power transfers and, at the same time, backs off the flows on more heavily loaded tie lines. The 230kV reinforcements will involve building a second Steele to Vienna line and converting an existing 138kV line from Vienna - Loretto - Piney Grove to 230kV. It will also involve adding two (2) 230/138kV transformers at Vienna and Loretto. These projects can be built and in-service within an approximate construction timeline of 40 months.

Other recommendations will be to advance a 138kV rebuild at Mt. Pleasant Substation and install a 30 MVAR switched capacitor bank on the 69kV at Indian River. The Mt. Pleasant to Townsend 138kV line will need to be rebuilt for higher ampacity to help with increased power transfers. In addition a 30 MVAR 69kV capacitor bank will be installed at Indian River to help off-set the loss of the VAR support of the units. These projects are already identified in the RTEP process, but will need to be advanced to coordinate with the retirements. These projects will only need about 24 months of construction time to be in-service.

ANALYSIS #2: RETIREMENT OF INDIAN RIVER #1 & #2 AND THE RETIREMENT OF EDGE MOOR #3 & #4

The removal of Edge Moor #3 and Edge Moor #4, along with the retirements of Indian River #1 and Indian River #2, showed similar contingency thermal problems, but the voltage violations were more severe.

The Edge Moor units are supplying around 70 MVAR of voltage support in the base case. The additional loss of reactive support from Edge Moor resulted in one severe voltage situation for the contingency of Red Lion to Cedar Creek 230kV circuit and numerous voltage violations similar to what we observed for the Indian River unit retirements.

The corrective actions to mitigate the violations are the same recommendations listed under Analysis #1; however, approximately 50 MVAR of additional transmission reactive support would need to be added to help alleviate the losses with moving power into the southern Delmarva system. The two locations identified for capacitor installations to help alleviate the voltage problems are Church 69kV and Cool Springs 69kV. The size of the capacitors should be about 25 MVAR per installation. The capacitor banks can be in-service within 24 months, excluding any bus work and available substation space.

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ANALYSIS #3: **RETIREMENT OF INDIAN RIVER #1 , #2, #3, & #4 AND THE RETIREMENT OF EDGE MOOR #3 & #4**

If all six (6) units are retired, there would be a reduction of 1,037 MW's of generation and close to 160 MVAR of dynamic voltage support on the Delmarva Peninsula. All this generation and MVAR could be readily replaced from other sources, if additional transmission infrastructure is built to supply the load in the Delmarva zone.

Completing a phase of the MAPP project, a 500kV line section from Salem/Hope Creek to Indian River 500kV, is sufficient to completely clear all thermal and voltage obstacles in the Indian River area. The completion of: (a) the 230kV portion of the MAPP project; (b) the 500kV portion of the MAPP project from Salem/Hope Creek to Indian River; (c) advancing certain 138kV line improvements; and (d) adding some capacitor banks, will alleviate any reliability problems arising from the retirements of the 6 coal-plant units. The estimated costs of all these improvements are $554M and the construction time is 54 months. These transmission enhancements will address reliability issues for the total Delmarva Peninsula (not just Delaware).

In addition, as load grows, the full MAPP project will provide additional reliability and economic benefits to the Delmarva Peninsula, as well as other parts of the PJM region.

RECOMMENDATIONS

The full MAPP project effectively addresses and removes all the thermal and voltage violations that are identified in this evaluation. Constructing the MAPP project in phases will also address load growth and generation retirement scenarios that could adversely affect generation reliability within Delaware, as described in the evaluation. The existing bulk transmission system would need to be upgraded to accommodate the amount of additional power transfers that will happen without the generation support.

COST ESTIMATES

Analysis #1 – Retirement of Indian River #1 & #2:

- Convert the existing Vienna to Loretto to Piney Grove 138kV transmission lines to 230kV. (part of the MAPP project)
  - **Cost: $24M**
  - **Construction: 20 – 28 months**

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- Install a 230/138kV transformer at Loretto and Vienna Substations. (part of the MAPP project)
  - **Cost: $10M**
  - **Construction: 20 – 28 months**

- Add a 2nd 230kV line from Steele to Vienna. (part of the MAPP project)
  - **Cost: $40M**
  - **Construction: 32 – 40 months**

- Rebuild the Mt. Pleasant to Townsend 138kV line (already in the Capital Budget for an in-service date of 2011/2012).
  - **Cost: $3.6M**
  - **Construction: 18 – 24 months**

- Reactive support is also needed to help off-set the loss of the dynamic VAR support of the units. We will need at least 30 MVARs of switched shunts on the 69kV bus at the Indian River Substation (new proposed RTEP project – this can be assigned to a Capital Project already in the budget for 2009).
  - **Cost: $1.5M**
  - **Construction: 18 – 24 months**

- **Total Cost: $79.1 with construction ranging from 18-24 months to 32-40 months.**

Analysis #2 – Retirement of Indian River #1 & #2 and Edge Moor #3 & #4:

- Add a two (2) staged 25 MVAR cap bank at Church 69kV
  - **Cost: $1.5M**
  - **Construction: 18 – 24 months**

- Add a two (2) staged 25 MVAR cap bank at Cool Springs 69kV
  - **Cost: $1.5M**
  - **Construction: 18 – 24 months**

- **Total Cost: $82.1M with construction ranging from 18-24 months to 32-40 months.**

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Analysis #3 – Retirement of Indian River #:1, #2, #3 & #4 and Edge Moor #3 & #4

- Complete improvements listed under Analysis 2
  - **Cost: $ 82.1M**
  - **Construction: 32 – 40 months**

- Build a new 500kV line from Salem to Indian River with a 500/230kV transformer at Indian River.
  - **Cost: $ 472M**
  - **Construction: 42 – 54 months**

- **Total Cost: $554.1M with construction ranging from 18-24 months to 42-54 months.**

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APPENDIX A

BRIEF DESCRIPTION OF THE PJM PROCESS

Delmarva Power's transmission facilities are located within the PJM Regional Transmission Organization. The PJM RTO is responsible for operating the bulk power electric system across all or portions of 13 States and the District of Columbia, and serves as the transmission service provider, the regional transmission planner, and the market administrator for the wholesale energy and capacity markets across that wide region. PJM's activities are closely regulated by the Federal Energy Regulatory Commission, and PJM performs all its RTO functions pursuant to agreements and tariffs on file with the FERC.

PJM as the regional planner administers the Regional Transmission Expansion Planning process. PJM's RTEP process identifies transmission system enhancements necessary to preserve the reliability of the electricity grid. PJM recently expanded its planning horizon to 15 years to provide for adequate time to plan, site, design and construct the needed transmission infrastructure.

PJM has specific installed capacity requirements to ensure the availability of sufficient generation, including reserves, to meet all load requirements reliably across the entire region. Further, all of this required generation has to meet "deliverability" requirements, meaning that, in aggregate, the distribution of the generation, coupled with the existing transmission system, must be sufficient to meet load in all PJM areas, even when there are relatively extensive transmission and generation outages. Further, PJM has explicit reliability standards that specify the required level of transmission facilities to assure service during extreme load and transmission outage conditions. All of these considerations are embedded in the ongoing PJM RTEP process, under which PJM has the authority to order PJM transmission owners to construct all required reliability upgrades. The RTEP process also includes economic considerations to identify transmission enhancements to mitigate excessive congestion.

In addition, PJM's generation de-activation rules provide PJM, as the RTO, mechanisms to address potential reliability issues arising from a generation retirement request. These rules include a notification period and a study process to ensure that reliability upgrades are implemented before a generator retires.

PJM competitive markets (i.e., energy, capacity and ancillary service markets) provide for market incentives to merchant generation, transmission and demand side resources.

Attachment 3

Delmarva Power RFP Cases: Summary of Assumptions

ICF/Delmarva Cases			Levelized Cost of Service (2005$)							Total Cost of Service (Nominal$ in Billions)						
			Levelized Cost				Amount Above Market			Total Cost				Amount Above Market		
Case No.	Case	Assumptions	Market	Conectiv	BWW	NRG	Conectiv	BWW	NRG	Market	Conectiv	BWW	NRG	Conectiv	BWW	NRG
1	Base Case	ICF Base case	85.4	86.6	99.5	107.6	1.2	14.0	22.1	21.2	21.3	23.2	26.5	0.1	2.0	5.2
2	Lower CO2 and gas prices	No National CO2 program in place, implying that RGGI carbon prices are $1.9 levelized compared to $15.5 levelized in the Base Case. In addition, increased demand for coal leads to gas prices that are 10.5% lower on a levelized basis.	75.1	76.8	92.8	96.0	1.7	17.7	20.9	18.3	18.4	21.0	23.0	0.1	2.7	4.8
3	Lower gas prices.	Gas prices are 18.3% lower than in the Base Case on a levelized basis	78.4	80.4	94.9	104.2	2.0	16.5	25.8	19.5	19.6	21.9	25.5	0.2	2.4	6.0
4	Higher gas prices.	Gas prices are 12.9% higher than in the Base Case on a levelized basis	90.0	91.0	102.8	109.8	1.0	12.7	19.7	22.5	23.2	24.5	27.1	0.7	2.0	4.6
5	Reduced capital costs	Capital costs are 35% lower for new coal generation resources and 25% lower for new gas resources.	81.0	82.7	95.7	104.4	1.8	14.7	23.4	20.2	21.0	22.9	25.7	0.9	2.7	5.5
6	No MAPP project.	The proposed MAPP and AEP transmission projects do not come in service.	86.2	87.2	100.0	107.8	1.0	13.8	21.6	21.3	22.0	23.6	26.5	0.7	2.3	5.2
7	Higher CO2 prices.	High CO2 price forecast ($24.5 levelized compared to $15.5 levelized in the Base Case), and lower demand for coal leads to higher gas prices (4.5% higher than the Base Case on a levelized basis).	93.3	94.0	104.6	117.9	0.6	11.3	24.6	23.5	23.6	24.8	29.4	0.1	1.3	5.9

Independent Consultant (IC) Cases			Levelized Cost of Service (2005$)							Total Cost of Service (Nominal$ in Billions)						
			Levelized Cost				Amount Above Market			Total Cost				Amount Above Market		
Case No.	Case	Assumptions	Market	Conectiv	BWW	NRG	Conectiv	BWW	NRG	Market	Conectiv	BWW	NRG	Conectiv	BWW	NRG
1	Base Case	Coal prices are only 60% of ICF Base Case prices and the gas price basis differential in Delaware is increased from $0.43 to $1.0(	86.2	87.3	100.2	102.2	1.1	14.0	16.0	21.5	22.0	23.7	25.1	0.5	2.2	3.6
2	Higher gas prices, increased NJ load, and no DE onshore wind.	Gas prices are 12.9% higher than in the Base Case on a levelized basis; NJ load increases at 1% annually, compared to a 20% decline through 2020 and then flat load growth in the Base Case; and no onshore wind generation is allowed in Delaware	93.0	93.5	105.3	106.7	0.5	12.3	13.7	23.1	23.2	24.7	26.1	0.1	1.7	3.1
3	Increased NJ load; OGS/CTs retirement; no MAPP, no Nukes in PJM Classic.	All oil/gas steam and combustion turbine units in PJM below 200MW capacity must retire at age 60; NJ load increases at 1% annually; the proposed MAPP and AEP transmission projects do not come in service; and no new nuclear units are allowed in PJM Classic	89.9	90.7	103.1	105.0	0.8	13.3	15.1	22.1	22.2	23.9	25.5	0.0	1.8	3.4
4	Increased NJ load; no DE onshore wind.	NJ load increases at 1% annually and no new on shore wind generation units are allowed in Delaware	88.7	89.6	102.2	104.3	0.9	13.5	15.6	21.9	22.0	23.8	25.4	0.1	1.9	3.5
5	Lower CO2 and gas prices.	No National CO2 program in place, implying that RGGI carbon prices are $1.9 levelized compared to $15.5 levelized in the Base Case. In addition, increased demand for coal leads to gas prices that are 10.5% lower on a levelized basis.	75.5	77.3	93.0	89.9	1.8	17.6	14.4	18.4	18.3	21.1	21.3	0.0	2.7	2.9
6	Lower gas prices.	Gas prices are 18.3% lower than in the Base Case on a levelized basis	79.2	81.0	95.5	99.3	1.9	16.4	20.1	19.7	19.8	22.1	24.2	0.0	2.4	4.4
7	Higher CO2 prices.	High CO2 price forecast ($24.5 levelized compared to $15.5 levelized in the Base Case), and lower demand for coal leads to higher gas prices (4.5% higher than the Base Case on a levelized basis)	94.2	94.6	105.3	113.1	0.3	11.1	18.9	23.8	23.8	25.1	28.1	0.1	1.3	4.4
8	Very high gas prices.	Gas prices are 30% higher than in the Base Case on an annual basis	97.8	97.8	108.9	109.5	0.0	11.1	11.7	24.1	24.1	25.6	26.9	-0.1	1.5	2.8
9	Increased NJ load; coal and OGS/CTs retirement; no MAPP; no Nukes in PJM Classic	All coal, oil/gas steam and combustion turbine units in PJM below 200MW capacity must retire at age 60; NJ load increases at 1% annually; the proposed MAPP and AEP transmission projects do not come in service; and no new nuclear units are allowed in PJM Classic.	90.8	91.5	103.9	105.5	0.7	13.1	14.7	22.3	22.3	24.1	25.6	0.0	1.8	3.3

Delmarva Power Revised IRP Cases: Summary of Assumptions

Case No.	Case	Case Description	Levelized Cost (2005$) Levelized (2007-2016)	Levelized Cost (2005$) Levelized (2011-2038)
1	Base Case	Base Case	68.5	85.5
2	Reduced Capital Costs - 1	Capital costs are 35% lower for coal, 25% lower for gas units.	66.0	81.2
3	NJ load increase	NJ load increases at historical and PJM expected rate compared to a 20% decline through 2020 and then increasing at PJM expected rate in the Base Case	71.2	88.6
4	No MAPP	The proposed MAPP and AEP transmission projects do not come in service.	68.8	86.2
5	No DSM	No DSM programs available	68.7	85.1
6	Low Gas	Gas prices are 18.3% lower than in the Base Case on a levelized basis.	64.1	78.5
7	High Coal Productivity	Higher productivity (cheaper) coal.	68.3	85.4
8	Reduced Capital Costs - 2	Capital costs increase significantly initially due to higher steel and construction costs, but fall back over time as congestion lessens.	67.0	83.7
9	Indian River Retirement, No MAPP	The proposed MAPP and AEP transmission projects do not come in service; Indian River units 1 and 2 retire in 2009.	69.0	86.6